كلّيات التقنية العليا
HIGHER COLLEGES OF TECHNOLOGY

CATALOGUE
2015-2016

Compiled by Central Academic and Student Services

Every effort has been made to ensure the accuracy of this publication at the time of going to press; however, HCT reserves the right to alter any programme or course. Students should check for any amendments prior to enrolment. All amendments or updates will be published in the official online version at www.hct.ac.ae

Our Vision

The Higher Colleges of Technology will be recognised as the best applied higher education institution in the United Arab Emirates, producing knowledgeable, innovative and skilled Emirati graduates that support the nation in pursuit of excellence.

Our Mission

The Higher Colleges of Technology is dedicated to the delivery of applied and vocationally focused programmes that achieve national and international standards at the Diploma, Bachelors and Masters levels. Delivered through excellent instruction based on 'learning by doing' and in a technology-rich environment, supported by applied research, our programmes are designed to meet the employment needs of the UAE and support Emirati students in becoming innovative and work-ready.

Higher Colleges of Technology

2015 - 2016 Catalogue

Message from the Chancellor

As the Higher Colleges of Technology rapidly approaches its third decade of operation, the focus in this 2015-16 academic year must continue to be a strong commitment to providing our students with the highest quality, job-relevant, applied and technical education. This will enable us to nurture the next generation of work-ready graduates and allow us to maintain our mission to be the UAE's, and the region's, top-ranked higher education institution in this field.

The HCT is grateful to have the substantial support and patronage of our nation's leaders and we greatly appreciate their guidance and leadership which have helped the HCT to become a model of educational effectiveness and achievement; renowned for providing highly skilled and well-prepared graduates. This catalogue reflects the directives and initiatives of our nation's leadership, such as being aligned to the UAE Vision 2020, which seeks to strengthen the UAE's reputation as a knowledge society.

This catalogue provides an extensive list of programmes and courses offered by the HCT's core academic Divisions which cover a broad spectrum of industry-relevant fields of study which will appeal to many young Emiratis eager to pursue post-secondary studies. This publication also contains details of the various Foundations, General Studies and Emirati and Arabic courses which will greatly assist many HCT students as they pursue the next phase of their education.

This comprehensive guide is designed to assist every HCT student to gain the maximum benefit from their time at our campuses, experiencing a complete and holistic education. This information will enable the students to reach their full potential and ultimately make worthwhile contributions to the UAE and their respective workplaces and communities.

I extend to all HCT students undertaking studies my best wishes throughout this exciting year of learning, knowledge acquisition, experiences and achievements.

Mohammad Omran Al Shamsi
Chancellor
Higher Colleges of Technology

Message from the Vice Chancellor

I am pleased to introduce you to the Higher Colleges of Technology's comprehensive catalogue for the 2015-2016 academic year, which will be a valuable aid for new and existing HCT students and their families, for faculty and staff members and for the broader community.

This complete catalogue fully details the programmes and courses in each of the Divisions being offered by HCT's colleges across the UAE, as well as providing our students with important dates and valuable information about the HCT's operational structures, policies, rules and regulations, its learning model and the services and resources it provides across all campuses.

The diversity of programmes offered in this catalogue indicates that the HCT is keeping pace with the needs of the United Arab Emirates' economy, by providing highly qualified and work-ready graduates. We must continue these endeavours to meet the requirements of society, and particularly employers, by offering the best quality, career-oriented academic and training programmes.

To achieve this we must ensure that all our courses are linked to industry needs and standards, no matter what the field, thus ensuring our students are receiving the appropriate experience in their field of choice so that they can seamlessly fit into the workplace.

As part of these processes the HCT is making steady progress with the CAA accreditation of its core academic disciplines, that will add to the various programmes which have been accredited from a number of prestigious international organisations.

We are also working closely with the National Qualification Authority (NQA) to ensure that all of HCT's academic programmes are aligned to the NQA's guidelines and the Emirates Qualification Framework (QF Emirates) so that we can provide our students with in-demand courses that will meet the needs of industry and employers. This will also lead to the international recognition of all qualifications delivered by the HCT.

At the HCT we are pleased to provide details of the many varied and exciting educational opportunities found in this catalogue, for all of our students to undertake throughout the UAE. I wish all HCT students, new and returning, great success in their studies throughout this year, as they strive for excellence in all that they undertake.

Dr Abdullatif Al Shamsi
Vice Chancellor
Higher Colleges of Technology

PREFACE

This catalogue is divided into three sections.

In the first section, an overview of the HCT is provided, including its history and status in the current educational climate of the United Arab Emirates. Information is also provided about HCT's governance and organisational structures (including a high-level organisational chart) and the key accrediting and benchmarking groups that ensure high quality academic programmes. This section concludes with an overview of the academic framework and the learning resources and services that support HCT students.

The second section provides more detailed information about admission to the HCT, its regulations, academic policies and procedures. It also includes key information about academic progression at HCT, grading, graduation and student conduct. A more complete statement of HCT Academic regulations and policies is published online at http://www.hct.ac.ae. The online catalogue may also contain any addenda for updated policies.

The third section provides information about programmes offered at HCT, the ideal semester and course descriptions. Included in this section is information about the programme learning outcomes or goals, and the programme length. This section also provides a detailed overview of individual programmes, including the required core courses, electives and General Studies courses, along with the credit units for each course. In some programmes, the courses and credit units required to graduate with a particular major in a discipline are also provided.

CONTENTS

HCT Academic Calendar

Academic Year 2015-2016

Fall Semester 2015	Sun 23 Aug – Thu 17 Dec 2015
Faculty report	Wed 12 Aug 2015
Classes start	Sun 23 Aug 2015
Last day for supplemental assessments (from previous semester)	Thu 27 Aug 2015
Last day to add courses	Thu 03 Sep 2015
Last day to drop courses	Thu 10 Sep 2015
Last day to withdraw from a semester length course without penalty	Sun 18 Oct 2015
Last day of classes	Thu 10 Dec 2015
Assessment period	Sat 12 – Thu 17 Dec 2015
Announcement of final grades and Academic Standing	Wed 23 Dec 2015
Semester break for students	Sun 20 Dec 2015 – Thu 7 Jan 2016 (Classes start Sun 10 Jan)
Semester break for faculty	Tue 22 Dec 2015 – Mon 4 Jan 2016 (Faculty report Tue 5 Jan)
Professional development days	Tue 5 Jan – Thu 7 Jan 2016
Spring Semester 2016	**Sun 10 Jan – Thu 12 May 2016**
Faculty report	Tue 5 Jan 2016
Classes start	Sun 10 Jan 2016
Last day for supplemental assessments (from previous semester)	Thu 14 Jan 2016
Last day to add courses	Thu 21 Jan 2016
Last day to drop courses	Thu 28 Jan 2016
Last day to withdraw from a semester length course without penalty	Thu 3 Mar 2016
Last day of classes	Thu 5 May 2016
Assessment period	Sat 7 – Thu 12 May 2016
Announcement of final grades and Academic Standing	Thu 19 May 2016
Semester break for students	Sun 27 Mar – Thu 7 Apr 2016 (Classes start Sun 10 Apr)
Semester break for faculty	Sun 27 – Thu 31 Mar 2016 (Faculty report Sun 3 Apr)
Professional development days	Sun 3 – Thu 7 Apr 2016
Summer Semester I 2016*	**Sun 22 May – Thu 30 Jun 2016**
Classes start	Sun 22 May 2016
Last day for supplemental assessments (from previous semester)	Thu 26 May 2016
Last day to add courses	Wed 25 May 2016
Last day to drop courses	Sun 29 May 2016
Last day to withdraw from a semester length course without penalty	Mon 6 Jun 2016
Last day of classes	Thu 28 Jun 2016
Assessment period	Wed 29 – Thu 30 Jun 2016
Announcement of final grades and Academic Standing	Thu 7 Jul 2016
Semester break for students	Sun 3 Jul - Thu 18 Aug 2016 (Classes start Sun 21 Aug 2016)
Semester break for faculty	Sun 3 Jul - Thu 11 Aug 2016 (Faculty report Sun 14 Aug 2016)

Summer Semester II 2016	Sun 10 Jul – Mon 15 Aug 2016
Classes start	Sun 10 Jul 2016
Last day to add courses	Wed 13 Jul 2016
Last day to drop courses	Sun 17 Jul 2016
Last day to withdraw from a semester length course without penalty	Wed 27 Jul 2016
Last day of classes	Thu 11 Aug 2016
Assessment period	Sun 14 - Mon 15 Aug 2016
Announcement of final grades and Academic Standing	Thu 25 Aug 2016
Professional development days	Tue 16 - Thu 18 Aug 2016

RELIGIOUS AND PUBLIC HOLIDAYS **	
Arafat Day	Tue 22 Sep 2015
Eid Al-Adha	Wed 23 to Fri 25 Sep 2015
Islamic New Year	Thu 15 Oct 2015
Martyrs' Day	Mon 30 Nov 2015
National Day	Wed 2 and Thu 3 Dec 2015
Prophet's Birthday	Thu 24 Dec 2015
Isra Wal Miraj	Thu 5 May 2016
Eid Al-Fitr	Wed 6 and Thu 7 Jul 2016

* All faculty and staff are on duty for Summer Semester I
** Religious holidays are subject to confirmation

Notes on Academic Calendar:

- The HCT will officially announce closure on a religious and/or public holiday to students and staff.
- Ramadan and religious holidays are based on confirmation of the official Hijra Calendar from the Ministry of Justice & Islamic Affairs.
- The off-duty days for faculty are based on the Academic Calendar published prior to the start of the Academic Year.

Overview of the HCT

Overview of the HCT

In 1985, HE Sheikh Nahayan Mabarak Al Nahayan, Chancellor of the United Arab Emirates University, made a commitment to establish a new system of post-secondary education for UAE nationals that would stress the ideals of productivity, self-determination and excellence.

His Excellency envisioned a system of the highest quality that would be used to educate Nationals for the professional and technical careers necessary in a rapidly developing society.

In fulfillment of that vision, the Higher Colleges of Technology (HCT) was established in 1988 by Federal Law No 2 issued by the Late Sheikh Zayed bin Sultan Al Nahyan, may his soul rest in peace.

Today, the system of the HCT is the largest higher educational institution in the United Arab Emirates with the current enrolment exceeding 20,000 students, all of whom are UAE nationals.

The seventeen HCT men's and women's campuses offer an impressive range of instructional programmes that are either federally funded or sponsored by employers in the fields of Applied Communications, Business, Computer Information Science, Engineering Technology and Science, Education, Foundations, General Studies and Health Sciences with all HCT programmes being delivered in English, excepting courses in Arabic and Emirati Studies.

Graduates of the HCT make immediate contributions to government, business and industrial sectors, and develop into leaders in their fields. The HCT is dedicated to student-oriented learning, which places the responsibility for education upon the students themselves and promotes lifelong learning.

Profile

Enrolment	23,633 plus 17 Masters
Campuses	17
Academic Divisions	9
Graduates	48,911
Credentials	71,459

رؤيتنا

أن تكون كليات التقنية العليا أبرز مؤسسة للتعليم العالي التطبيقي في دولة الإمارات العربية المتحدة، توفر الخريجين المواطنين من ذوي المعارف والمهارات الفنية والإبداعية الذين يدعمون مساعي الدولة لتحقيق التميز.

Our Vision

The Higher Colleges of Technology will be recognised as the best applied higher education institution in the United Arab Emirates, producing knowledgeable, innovative and skilled Emirati graduates who support the nation in pursuit of excellence.

رسالتنا

تلتزم كليات التقنية العليا بتوفير البرامج التطبيقية والمهنية المستوفية للمعايير المحلية والعالمية على مستويات الدبلوم والبكالوريوس والماجستير. وتهدف البرامج الدراسية التخصصية إلى تلبية احتياجات سوق العمل بالدولة، وتوفير الدعم اللازم للطلبة المواطنين في تحفيزهم على الإبداع، وتأهيلهم للعمل خلال عملية تدريس متميزة تعتمد على نهج التعلم بالممارسة والبحث التطبيقي في بيئة تقنية متطورة.

Our Mission

The Higher Colleges of Technology is dedicated to the delivery of applied and vocationally focused programmes that achieve national and international standards at the Diploma, Bachelors and Masters levels. Delivered through excellent instruction based on 'learning by doing' and in a technology-rich environment, supported by applied research, our programmes are designed to meet the employment needs of the UAE and support Emirati students in becoming innovative and work-ready.

HCT Institutional Strengths

HCT's institutional strengths that differentiate it from other higher educational institutions in the UAE are:

- **commitment to educational access** - HCT is an access institution for the UAE built upon twenty-five years of producing high quality Emirati graduates who are prepared to enter the workforce and contribute to economic development and UAE society;
- **practical application of knowledge** - HCT is a national resource for connecting the practical application of knowledge to workforce needs and applications. This is the cornerstone of the HCT learning model and its educational philosophy;
- **the quality of our faculty and learning environment** - HCT produces graduates with superior technical skills, Arabic and English language competency, and work readiness skills that have enabled graduates to be productive and contributing members to the economy and society. The quality and high employment rate of its graduates are reflective of the quality of the faculty and the learning environment;
- **institutional and programme accreditation** - HCT programmes are internationally accredited by professional accrediting agencies;
- **linkages with business and the community** - HCT programmes are continually aligned with the changing and emerging needs of business and industry; and are supported by state-of-the-art technologies. HCT campuses are also cultural and community centres that contribute to local culture, history and Emirati heritage;
- **graduate employment** - HCT's most consistent effectiveness measure is the high employment rate of its graduates who are in strong demand by employers across the UAE.

Governance and Organisation

Governance

The Higher Colleges of Technology (HCT) constitute a federal independent academic corporate body for higher education established under Federal law no. 2 of 1988 and later reorganised under Federal law no. 17 of 1998. HCT confers degrees at the Graduate, Bachelor of Applied Science and Diploma levels. The HCT operates as a system of 17 separate campuses for male and female students in urban and rural locations in five emirates. The headquarters are located in the city of Abu Dhabi.

The HCT is governed by a Board of Trustees which includes the Chancellor, HE Mohammad Omran Al Shamsi, the Vice Chancellor, Dr Abdullatif Al Shamsi, and other qualified and experienced members from various sectors in the UAE appointed by the Cabinet on the recommendation of the Chancellor. The Chancellor is Chair of the Board of Trustees and the legal representative of the System and is responsible for carrying out the decisions of the Board of Trustees. The Vice Chancellor is the Chief Executive Officer and is responsible for the management of the HCT and the implementation of its regulations and resolutions. In addition, the Vice Chancellor is responsible for developing an institutional culture of innovation as well as enhancing HCT's organisational performance.

Organisation

The HCT organisation includes a central administration with four divisions, each headed by a Deputy Vice Chancellor, namely: Administration Division; Academic Affairs Division; Campus Operations Division; and Strategy and Communication Division (see p18 for a high-level organisational chart).

Administration Division

The Administration Division is made up of various units including Human resources, Finance, Information Technology, Facilities and Services, and Procurement and Contracts. They perform the key functions and services that provide a centralised resource to enable the campuses to achieve their educational objectives.

Academic Affairs Division

Academic Affairs provides academic leadership, academic policy and planning guidance, coordination and evaluation of instructional programmes and processes, academic standards and assessment, and learning resources in support of the implementation of academic programmes. It is also responsible for developing the research plan for HCT and for managing and monitoring faculty members' activities and building their research capabilities.

Academic Divisions

There are nine academic divisions, namely:

- Division of Arabic and Emirati Studies
- Division of Applied Communications
- Division of Business
- Division of Computer Information Science
- Division of Education
- Division of Engineering Technology and Science
- Division of Foundations
- Division of General Studies
- Division of Health Sciences

The Division Executive Deans provide academic leadership to ensure the quality of teaching, learning, evaluation and assessment. They manage academic resources to support all HCT campuses, and maintain and enhance the HCT's learner-centred environment.

Industry Sponsored Programmes

HCT is dedicated to the delivery of industry sponsored courses and programmes to UAE nationals and expatriates, offering Diploma, Bachelor of Applied Science and Graduate level degree credentials aimed at developing the workforce in a constantly changing environment. Individuals may have the opportunity to join graduate Master degree programmes that are offered in response to the region's needs. The objective is to serve the wider community of UAE nationals and expatriates by providing them with high calibre continuing education and to contribute to the development of the country's workforce, ensuring individual and economic growth and sustainability.

The office of Academic Affairs also manages a number key institutional roles.

Teaching and Learning Department

The HCT is committed to providing the highest quality educational experience for students. The Teaching and Learning Department comprises three teams: Educational Technology, Library Technical Services, and Professional Development and Practice. Together, the three teams work with all Divisions and their respective Executive Deans to develop institutional capacity that enhances the student experience. This includes:

- using educational technologies more effectively to support student learning;
- supporting the design and development of programmes and courses that align with the National Qualifications Framework for the Emirates and programme accreditation via the Committee for Academic Accreditation;
- providing library technical services to all HCT campuses and users;

- supporting professional development workshops and programmes for faculty; and
- supporting the scholarship of teaching and learning.

The Teaching and Learning department also works closely with the Executive Deans to support the 170@17 initiative to develop the skills and knowledge of new Emirati faculty who have joined HCT. In addition, the department also supports the institutional Learning Management and Course Management Systems, the use of eTextbooks in all programmes, and undertakes a variety of initiatives to improve the student learning experience.

Faculty Affairs and Applied Research (FAAR)

FAAR is committed to supporting an active research community at HCT. FAAR provides leadership in devising, implementing and monitoring the system-wide applied research agenda, developing innovative research approaches towards building partnerships with industry and communities.

Programmes and Curricula

The Programmes and Curricula Department is responsible for ensuring quality in programme development, undertaking periodic curriculum reviews and ensuring that assessment of student learning outcomes are in accordance with HCT policies and procedures. The Office also oversees the development of new academic programmes including modifications to established programmes, and external reviews.

Organisational Excellence

The Office of Organisational Excellence is the unit responsible for facilitating, supporting and monitoring government and institutional excellence, assessment, institutional research, and accreditation within the system of the Higher Colleges of Technology. The unit aims to ensure the attainment of high quality standards across the HCT. Its role is to refine and coordinate a participatory process of institutional evaluation with the goal of continuous quality improvement of academic programmes, curriculum delivery, graduate outcomes and student support services and administrative units that guide the HCT towards accomplishment of its mission.

Campus Operations Division

The Campus Operations Division is responsible for providing leadership and oversight to all Campus Directors within the HCT system. It provides strategic vision and direction to all campuses. Specifically, the Division is responsible for operations management at all HCT campuses which includes financial, HR, planning, facilities administration, student support services, and community relations and academic operations. Strategy and Communication Division The Strategy and Communication Division is responsible for developing and implementing the HCT Strategic Plan and for achieving its performance indicators. The Division directs and monitors the use of different digital (including social media) and printed media that connect HCT with its internal and external stakeholders. The Division is also responsible for establishing, managing, and maintaining HCT relations and partnerships with its larger community.

Student Services

Provides student support include marketing and student recruitment, student life, student success and central registry across the HCT system.

Campus Academic Operations (CAO)

Campus Academic Operations undertake, manage and oversee all facets of academic operations required for the delivery of academic programmes and curricula at a campus in order to deliver a quality learning experience for students. This Office has direct oversight of three key elements that support student learning: labs and workshops, academic services and advising, and learning resources.

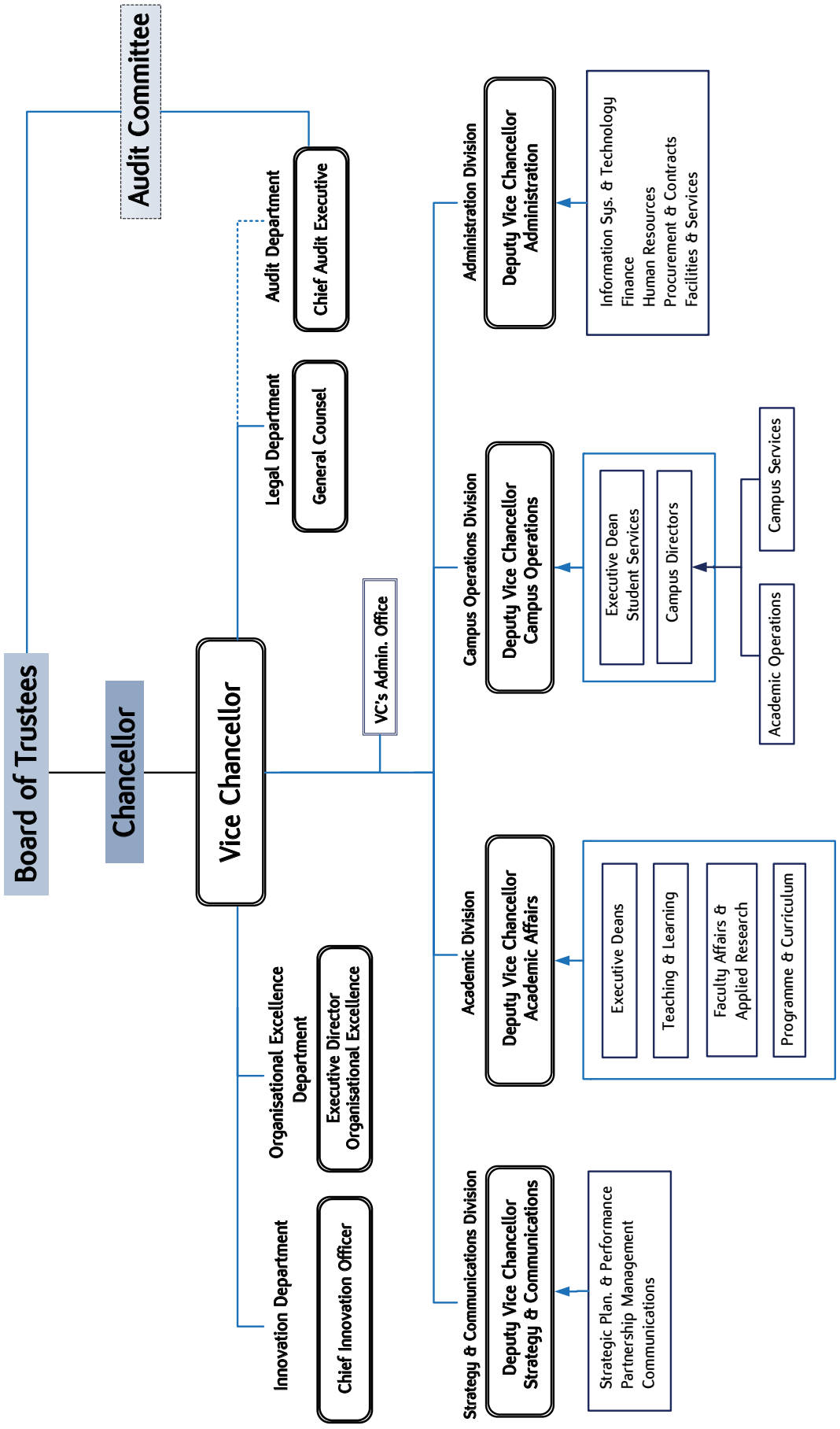
Campus Services (CaS)

Campus Services are responsible for directing the planning, development and implementation of all non-academic support services at a campus, including Student Services, IT Services, Facilities, and Procurement. The Office of CaS provides leadership to ensure that campus services are both efficient and effective in meeting the academic and social needs of students when on the campus.

Strategy and Communication Division

The Strategy and Communication Division is responsible for developing and implementing the HCT Strategic Plan and for achieving its performance indicators. The Division directs and monitors the use of different digital (including social media) and printed media that connect HCT with its internal and external stakeholders. The Division is also responsible for establishing, managing, and maintaining HCT relations and partnerships with its larger community.

HCT Overall Organisation Chart



Higher Colleges of Technology Campus and Division Contacts

HCT has campuses throughout the UAE. Each campus has a Campus Director who is responsible for community relations and creating an effective learning environment at the local community level. In addition, each Division has an Executive Dean who is responsible for the academic integrity, quality and delivery of the programmes under their leadership. The contact information for each is provided below:

HCT Campus	Founded	Director	Telephone	Fax	PO Box	Web
Al Ain Men's	1988	Dr Yahya Al Ansaari	03-782 0888	03-782 0099	17155	aac.hct.ac.ae
Al Ain Women's	1988	Ms Hamsa Al Ammari	03-782 0777	03-782 0766	17258	aac.hct.ac.ae
Abu Dhabi Men's	1988	Mr Abdu Rahman Al Jahoushi	02-445 1514	02-445 1571	25035	admc.hct.ac.ae
Abu Dhabi Women's	1995	Dr. Addel Al Ameri	02-641 3839	02-641 3456	41012	adwc.hct.ac.ae
Abu Dhabi Women's - Khalifa City	2009	Dr. Addel Al Ameri	02- 657 8499	02 657 8140	41012	adwc.hct.ac.ae
Dubai Men's	1989	Dr Hashim Al Zaabi	04-326 0333	04-326 0303	15825	dbm.hct.ac.ae
Dubai Women's	1989	Dr Tarifa Al Zaabi	04-267 2929	04-267 3939	16062	dwc.hct.ac.ae
Fujairah Men's	1989	TBA*	09-222 2112	09-222 2113	4114	fjw.hct.ac.ae
Fujairah Women's	2004	TBA*	09-228 1212	09-228 1313	1626	fjw.hct.ac.ae
Madinat Zayed Men's	2006	TBA*	02-894 3700	02-884 9081	58855	mzc.hct.ac.ae
Madinat Zayed Women's	2006	TBA*	02-884 3700	02-884 9081	58855	mzc.hct.ac.ae
Ras Al Khaimah Men's	1999	Dr Ali Al Mansoori	07-2026 800	07-222 3955	4793	rakc.hct.ac.ae
Ras Al Khaimah Women's	1993	Dr Ali Al Mansoori	07-2026 600	07-221 0660	4792	rakc.hct.ac.ae
Ruwais Men's	2007	Mr Nial Farrell	02-8943800	02-8778158	58855	mzc.hct.ac.ae
Ruwais Women's	2007	Mr Nial Farrell	02-8943800	02-8778158	58855	mzc.hct.ac.ae
Sharjah Men's	1993	Dr Muhaddittha Al Hashimi	06-558 5222	06-558 5252	7946	sjm.hct.ac.ae
Sharjah Women's	1998	Dr Muhaddittha Al Hashimi	06-558 5333	06-558 5353	7947	sjw.hct.ac.ae

* To be announced

HCT Academic Divisions	Executive Deans
Arabic and Emirati Studies	Dr Obaid Al Muhairi
Business	Dr Ayesha Abdulla
Computer Information Science Applied Communications	Dr Hamad Odhabi
Education and General Studies	Dr Phil Quirke
Engineering Technology and Science	Dr. Mohammad Aljarrah
Foundations	Mr Tim Smith
Health Sciences	Dr Muhaddítha Al Hashimi
HCT Academic Support	**Director**
Teaching and Learning	Dr David Kennedy
Student Services	Mr Ahmed Al Mulla

Accreditation and Benchmarking

The Higher Colleges of Technology has an ongoing commitment to achieving international standards in the programmes delivered and the levels of graduate skills. To ensure such standards are met and its programmes are at the cutting edge of technology and industry standards, the HCT has formed alliances with leading universities, educational associations and professional accreditation boards around the world.

Accreditation

Higher education accreditation is the formal recognition by a recognised accrediting body that a university, college or school meets accepted standards in its educational programmes, curriculum, faculty, services and facilities.

Institutional accreditation applies to an entire institution, while programme accreditation applies to a particular programme of study.

The HCT has campuses located in the Emirates of Abu Dhabi, Dubai, Sharjah, Ras Al Khaimah, and Fujairah and is officially licensed from 1 May 2014 to 30 April 2019 by the Ministry of Higher Education and Scientific Research of the United Arab Emirates to award degrees/qualifications in higher education.

A number of HCT programmes of study are accredited by organisations recognised by the Council for Higher Education Accreditation (CHEA), USA, and a further number are accredited by nationally-recognised organisations from Australia, Canada, the United Kingdom, and the United States. Accredited programmes of study are listed in the table below.

Academic Division	Accreditation - Programme of Study
Applied Communications	The following programmes are accredited by the American Communication Association (ACA), USA up to December 2016: ▶ HD-BAS in Applied Media Studies – ADMC, ADWC, DMC, DWC, FWC, RKWC, SWC ▶ BAS in Applied Communications (Animation) – DWC, SWC ▶ BAS in Applied Communications (Applied Media) – ADMC, ADWC, DMC, DWC, FWC, RKMC, RKWC, SWC ▶ BAS in Applied Communications (Corporate and Media Communication) – ADMC, DWC ▶ BAS in Applied Communications (Fashion Design and Merchandising) – SWC ▶ BAS in Applied Communications (Graphic Design) – ADWC, DWC, SWC ▶ BAS in Applied Communications (Video Production) – ADMC, ADWC, DMC, RKMC, RKWC, SWC

Business	The following Business programmes are accredited by the Accreditation Council of Business Schools and Programs (ACBSP, USA) up to 2018: **Higher Diploma (accredited at the level of 'Associate Degree')** ▶ Business and Management (Accounting) – AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC ▶ Business and Management (Financial Services) – AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC ▶ Business and Management (General) – AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC ▶ Business and Management (Human resources) – AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC ▶ Business and Management (Marketing) – AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC ▶ Business and Management (Travel and Tourism) – AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC ▶ eBusiness Management – AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC **Bachelor of Applied Science** ▶ Business and Management (Accounting) – AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC ▶ Business and Management (General) – AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC ▶ eBusiness Management AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC ▶ Engineering Management – AAMC, AAWC, ADMC, ADWC, DMC, DWC, FMC, FWC, RKMC, RKWC, SMC, SWC
Computer Information Science	The following programmes are accredited by the Canadian Information Processing Society (CIPS), Canada up to December 2015: **Bachelor of Applied Science (One year 'Top-up')** ▶ Business Information Technology ▶ Computer network Technology ▶ Information Management **Higher Diploma / Bachelor of Applied Science** ▶ Information Technology (Business and Information Systems) ▶ Information Technology (Information Administration) ▶ Information Technology (Interactive Multimedia) ▶ Information Technology (Information Systems Security) ▶ Information Technology (Network Engineering) ▶ Information Technology (Software Engineering) ▶ Information Technology (Web Development)

	Bachelor of Applied Science (Four years) ▶ Information Systems (Business Solutions) ▶ Information Systems (Security and Forensics) ▶ Information Technology (Applications Development) ▶ Information Technology (Instructional Technology and Training Management) ▶ Information Technology (Interactive Multimedia Technologies) ▶ Information Technology (Networking)
Engineering Technology	The following programmes are licensed by the General Civil Aviation Authority, UAE: ▶ HD in Applied Aviation Maintenance Technology (Airframe and Aero Engines) ADMC, DMC ▶ HD in Applied Aviation Maintenance Technology (Avionics) – ADMC, DMC The following programmes are accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org: Bachelor of Applied Science ▶ Chemical Engineering Technology – ADMC ▶ Civil Engineering Technology, ADMC – DMC ▶ Electrical Engineering Technology – AAMC, AAWC, ADMC ▶ Electronics Engineering Technology – ADMC, ADWC, DMC, SMC, SWC ▶ Mechanical Engineering Technology – AAMC, AAWC, ADMC
Health Sciences	The following Bachelor-level programme is accredited by the Health Information Management Association of Australia (HIMAA), Australia up to July 2018: ▶ BAS in Health Information Management programme.

Benchmarking

Benchmarking against other organisations enables the HCT to develop and maintain programmes of study and academic standards aligned to international best practice. Programmes of study that are benchmarked against external bodies are listed in the table below.

Academic Division	Benchmarking -Programme of Study
Education	▶ Bachelor of Education: benchmarked with the Graduate School of Education at the University of Melbourne, Australia.

Academic Framework

The Higher Colleges of Technology offers instructional programmes leading to Bachelor of Applied Science Degrees in: Applied Communications, Business, Computer Information Science, Education, Engineering Technology and Science, and Health Sciences.

Bachelor of Applied Science Degree

To earn a Bachelor of Applied Science from the HCT, a student must:

1. Have a minimum cumulative GPA of 2.0 in the overall baccalaureate coursework.
2. Complete at least 120 credit units including:
   a. 10 General Studies courses in specified areas.
   b. a minimum of 60 units in a programme major.
3. Complete all required courses for a programme major.

Applied Diploma

To earn an Applied Diploma from the HCT, a student must:

1. Have a minimum cumulative GPA of 2.0 in the overall baccalaureate coursework.
2. Complete at least 60 credit units including:
   a. required General Studies courses.
   b. required core and elective units within a programme major.
3. Complete all required courses for a programme major.

Course Credit Definition

HCT course credit units are granted in recognition that a course of study has been successfully completed as per the requirements of the relevant course outline. The number of credit units assigned to each course is based on the amount of time that students are expected to spend under supervised delivery as well as independent study of the content in order to achieve learning outcomes. For example: a standard Bachelor-level course is assigned 3 credit units*, but this may vary based on the specific learning outcomes of the course, and the associated requirements from the students, or other factors. The set number of credits for each course is specified in the course outline. Most courses are one semester long which, if completed with a passing grade, carry the number of course credit units as specified. Some courses are two semesters long, and credit units are awarded only upon the satisfactory completion of both semesters. Credit may not be given for completing the first semester only of a year-long course.

* One credit Unit equals not less than 15 hours per semester.

Graduation Requirements

This framework provides a pattern that accommodates academic programme requirements, a reasonable, substantive general education component, sensitivity to the learning needs of our students and feasibility.

The Qualifications Framework for the Emirates (QFE)

The Applied Bachelor and Diploma programmes have been aligned with the National Quality Framework of the Emirates. The QF Emirates is the UAE's national Qualifications Framework (termed the "Qualifications Framework for the Emirates" (QFE) to distinguish it from other countries). The QFE Framework also provides detailed information on the level of knowledge, skills, and competencies required of graduates in the UAE. The specific levels of learning attained by HCT graduates in the QFE Framework are mapped against the appropriate QFE levels.

Handbook available at: http://www.aurak.ac.ae/media/document/QF-Handbook.pdf

Level	Generic Nomenclature	Principal Qualification titles used in the QF*Emirates* (each with its own profile)		
		Vocational Education and Training (VET)	Higher Education (HE)	General Education (G 12 – GE)
10	Doctoral Degree	—	Doctoral	—
9	Master Degree	Applied Master	Master	—
8	Graduate Diploma	Applied Graduate Diploma	Postgraduate Diploma	—
7	Bachelor Degree	Applied Bachelor	Bachelor	—
6	Diploma	Advanced Diploma	Higher Diploma	—
5	Diploma / Associate Degree	Diploma	Associate Degree	—
4	Certificate	Certificate 4	—	Secondary School Certificate (G 12)
3	Certificate	Certificate 3	—	TBA
2	Certificate	Certificate 2	—	—
1	Certificate	Certificate 1	—	—

Source: QFEmirates handbook page 40

The Learning Model

The UAE Government is committed to 21st century nation-building through the provision of cutting-edge education to all Nationals who want to develop their potential.

The HCT aims to be a key educational pillar on which the modern nation is built. The HCT Learning Model is a strategic framework through which the HCT mission is attained.

The HCT Learning Model is based on the following professional values:

- innovative practice;
- continuous improvement;
- professional integrity;
- efficiency and effectiveness;
- responsiveness to the needs of stakeholders.

It sets standards for the design of curricula, gives principles which should be followed in teaching and learning, and guidelines for assessment within the HCT.

The Learning Model defines the HCT's educational philosophy and identifies eight graduate outcomes:

Graduate Outcome One: Communication and information literacy

According to their credential, HCT graduates demonstrate an appropriate level of competence in:

- communicating information, opinions, concepts and ideas effectively in English and Arabic through the spoken and written mediums to a variety of audiences;
- selecting, understanding, evaluating and making effective use of information from a variety of sources presented in both spoken and written form in English and Arabic; and
- acting ethically in the use and presentation of information from a variety of sources.

Graduate Outcome Two: Critical and creative thinking

According to their credential, HCT graduates demonstrate an appropriate level of competence in:

- evaluating and analysing knowledge and information;
- identifying and understanding problems; and
- demonstrating creativity and innovation in problem-solving.

Graduate Outcome Three: Global awareness and citizenship

According to their credential, HCT graduates demonstrate an appropriate level of competence in:

- recognising and analysing ethical dilemmas, and practicing ethical decision-making;
- recognising and analysing the issues affecting the UAE society, regional and global environment;
- recognising and analysing the interrelations between the UAE, regional and global contexts and cultures; and
- recognising the role of the leaders of the UAE in developing the social, cultural, economic and political aspects of the nation.

Graduate Outcome Four: Technological literacy

According to their credential, HCT graduates demonstrate an appropriate level of competence in:

- recognising the influence of technology upon individuals and society; and
- using technology to perform effectively in their personal and professional lives and acting ethically when using technology.

Graduate Outcome Five: Self-management and independent learning

According to their credential, HCT graduates demonstrate an appropriate level of competence in:

- reflecting on and evaluating their own learning;
- working independently; and
- demonstrating a positive work attitude and effective work habits.

Graduate Outcome Six: Teamwork and leadership

According to their credential, HCT graduates demonstrate an appropriate level of competence in:

- understanding the functions and dynamics of groups;
- contributing effectively to teamwork;
- acting effectively in a leadership role; and
- demonstrating confidence and social maturity in interpersonal relationships.

Graduate Outcome Seven: Vocational competencies

According to their credential, HCT graduates demonstrate an appropriate level of competence in:

- applying profession-specific knowledge required for successful employment in their chosen field;
- applying profession-specific skills required for successful employment in their chosen field; and
- demonstrating the specific attributes required for successful employment in their chosen field.

Graduate Outcome Eight: Mathematical literacy

According to their credential, HCT graduates demonstrate an appropriate level of competence in:

- applying relevant numerical analytical tools to solve problems in authentic contexts; and
- analysing and communicating mathematical concepts with confidence in authentic contexts.

Through its learning model, academic staff are committed to providing educational experiences that will transform school leavers into HCT students who will graduate with the knowledge, skills and attributes to effectively contribute to the nation-building process and to help them develop a sense of personal and social responsibility.

The educational experiences that the HCT provides ensure that HCT students:

- are capable of graduating from their chosen programme with academic integrity;
- are deserving of respect and equally capable of respecting others;
- can be active contributors to nation-building;
- are responsible and accountable for their actions;
- act ethically;
- learn more effectively in applied learning environments;
- are able to communicate effectively using English and Arabic;
- are technologically literate;
- are mathematically literate;
- are able to work independently and collaboratively; and
- are able to think critically and creatively.

Academic Learning Resources

Libraries

HCT libraries are among the best equipped in the Gulf region, housing extensive collections of print and electronic resources. HCT libraries provide access to advanced information and learning technologies. Library users can search the HCT web-based library catalogue to locate and access library materials housed at all 17 libraries within the system. All library resources are accessible at http://libraries.hct.ac.ae. The HCT library collection resources include:

- over 357,730 print titles, 406,045 eBooks, 70,262 eJournals and 127 (programme-specific and general) databases;
- local and international newspapers, magazines and journals (print);
- annual reports from government and industry;
- instructional resources (including online);
- DVD's, fiction and non-fiction;
- access to high-performance computers; and
- streaming video facilities, for campuses and classrooms (at selected campuses).

HCT students and staff also have access to over 350,000 books via LIWA (http://liwa. ac.ae). LIWA is a shared catalogue of all federally funded UAE higher education institutions (HCT, United Arab Emirates University and Zayed University).

Librarians and associated library staff are essential resources who assist students and faculty in learning, teaching and research. Each library also provides individual and group instruction on topics ranging from general information, literacy skills, guiding library patrons to relevant resources in specific areas of study, and undertaking academic research.

Independent Learning Centres

The Independent Learning Centres' (ILCs) mission is to provide an enriched environment that extends beyond the classroom learning to support students. The ILC staff provides students with a rich set of individualised learning opportunities, including face-to-face and self-paced on-demand digital content. The ILC programme caters for individual differences and learning styles that support a variety of student learners.

eTextbooks, resource books and laboratory materials

HCT has made the commitment to become the pre-eminent technology-supported higher education institution in the UAE. All current students are provided with resources appropriate to their programme and year of study that support learning in and out of the classroom consistent with the Mission and Goals of HCT. These resources may include:

- eTextbooks and other interactive electronic resources as selected by the teaching faculty; and
- discipline specific resources (e.g., software).
- additional resources to support student learning provided by the campus or division including materials, equipment and tools required for laboratory and other practical instruction (e.g. including discipline-specific clothing/uniforms, hard hats, protective boots, etc. which then become the property of the student).

Internet Access

The HCT internet access and electronic mail services are provided under the authority of the Chancellor and the Vice Chancellor of the HCT in accordance with federal laws and regulations governing the use of these services. Users of the internet are governed by the HCT Internet Access and Electronic Mail Policy. Provision of access to internet resources and services is intended to support the need for HCT graduates to develop the computer and information-seeking skills that are essential for the workplace and for lifelong learning.

Students are expected to equip themselves with tablet computers and/or laptops required to support their learning.

Copyright Policy and Guidelines

The main objectives of the HCT Copyright Policy and Guidelines are:

- to ensure compliance with the provisions of UAE Federal Law No. 7, 2002;
- to establish and protect HCT ownership of all HCT produced materials;
- to provide guidelines in determining the application principles for interpretation of the law.

The HCT acknowledges that the Ministry of Information and Culture is regarded as the definitive source of information on matters involving intellectual property rights.

HCT Services and Resources for Students

Student Services

Student Services at the HCT campuses involve the colleges' Academic Registry Services and Student Services departments, which work closely with Central Student Support Services. These departments ensure the academic integrity of HCT credentials, as well as students' access to a supportive campus environment. The departments' roles help to promote all students' personal well-being and academic success, as well as to prepare them to contribute to the on-going development of the UAE.

The College Academic Registry Services departments provide all record-related services from admission, registration, official transcripts, course and examination schedules, student timetables and verification of graduation eligibility up to final credential award.

The College Student Services departments are responsible for supporting the different aspects of student life, starting with new student recruitment and orientation. The staff assist with financial aid services, student behaviour, discipline and attendance issues, safety and security, counselling services, wellness and any special needs accommodations. They give guidance to students organising student councils, peer tutoring, extra and co-curricular athletic and recreational activities as well as clubs and other special events. They also provide career services and organise alumni activities.

Alumni Association

There is an HCT Alumni Association which graduates are welcome to join. This association:

- helps graduates stay connected to each other;
- keeps graduates informed about the HCT international and national conferences and events;
- provides opportunities for lifelong learning;
- allows graduates to sign up for voluntary support; and
- provides career advice and opportunities with a directory of employers

Career Services

The HCT Career Services are staffed by specialists in career management and counselling, which place strong emphasis on career development in a constantly changing global workforce.

The activities of the HCT Career Centres include:

- assisting students to make informed career decisions, and provide career assessment opportunities;
- providing one-to-one counselling to help students match their interests with suitable careers;
- building relationships between the HCT, employers and business communities;
- organising career fairs and other career-centred events, including summer orientation sessions for high-school students;
- posting employment listings received from employers in both the private and public sectors;
- assisting students in the search for employment and liaising between employers, graduates and students; and
- providing student-focused workshops on topics such as career planning, developing a positive professional attitude, CV and resume writing as well as job interview techniques.

Counselling Service

The HCT provides personal and academic counselling to help students with their classroom performance or social adjustment at the campus.

Campus Counsellors are available to meet students who are having academic or personal problems that interfere with their classroom performance or social adjustment. Counsellors can help students find solutions to their problems and facilitate academic and personal growth.

Students are assigned an Academic Adviser at the start of each academic year. The adviser is usually a class teacher who will give academic advice and monitor progress.

Extra-curricular Activities

During the year, a wide variety of physical, social and cultural activities are available to interested students. Students are encouraged to make every effort to

participate in these activities, which are designed to supplement and complement their classroom work, enhance their experience at the HCT, and provide a healthy balance in life.

In many cases, students organise or coordinate campus events such as film festivals, athletic and recreational competitions, health and wellness days, heritage and cultural displays, art shows and career fairs. These events develop individual and group initiatives, teamwork and leadership skills. They provide the students with the opportunity to apply the skills they have learned, to support charitable causes and to demonstrate academic achievements.

Safety and Security

The HCT is concerned that all individuals the students meet are properly authorised to enter the campuses. All HCT campuses have security gates, with security personnel stationed at each entrance. These security officers allow only those who are properly authorised to enter the campus.

Security officers have the right to prevent female students from leaving the campus without permission, and to carry out random checks on student and staff vehicles.

All HCT security officers are appointed for the safety of the staff and students of the campuses, and should be treated with proper respect.

Fire Drills

In case of fire, each campus has procedures to follow. Students should learn the locations of emergency exits, fire alarms and fire extinguishers. In the event of a fire drill or emergency, students must follow the directions of teachers or security personnel.

Medical Cases

If a student is seriously ill and needs help, the teacher will call Student Services who will provide assistance and contact their family. An ambulance will be called if necessary.

Student Councils

Each campus has a Student Council to give the student body an effective means for providing input to the colleges so as to improve overall student life. The Student Councils are composed of students from the campuses, thus providing many opportunities for student growth and leadership development such as:

- planning and organising student activities;
- developing closer relationships between students and faculty;
- establishing a better atmosphere for learning;
- informing the campus of student needs and recommendations;
- developing leadership qualities; and
- improving student morale.

The name and organisational structure of councils and their membership may vary from campus to campus.

Student representatives from all the campuses also meet to elect a system-wide HCT Student Council. This committee represents the wider HCT student body, inside the country as well as abroad.

Students with Special Needs

Under the conditions outlined in HCT policy, reasonable academic accommodation is provided for students with special needs.

Students with special needs (e.g. physical, medical or learning difficulties) are eligible for appropriate support which could take the form of special equipment or materials, or additional time to complete course requirements. Students are required to provide appropriate medical documentation detailing their special need.

It is important that students contact the Student Services office at their campus as early as possible in order to obtain the necessary support.

Financial Aid

The HCT recognises that some students may need assistance with meals and transportation costs. Students who require such assistance are encouraged to contact their campus Student Services Supervisor or Campus Counsellor for details regarding financial aid.

Student Services can also assist in various ways, such as helping to organise temporary employment or providing equipment.

In addition, the HCT forms partnerships with employers who can provide opportunities to sponsor students to complete regular programmes. Sponsored students progress towards graduation with the support of employers in return for commitments specified in the sponsorship agreement.

Academic Policies

A full listing of HCT Academic Regulations and Policies containing links to related procedures and documents is available in the electronic version of the Catalogue available at

Key Terminology

Credit Hour: A unit that measures educational credit that is usually based on the number of hours students are in the classroom.

A lecture-based course, whose duration is a full semester (at least 15 weeks), the course requires a minimum of one classroom hour (50 minutes) to 1 credit hour plus 2 hours of homework for a total of 3 hours. Total classroom hours must include at least 45-64 hours regardless of the duration of the term.

For courses that include a laboratory section, generally there are two hours of classroom laboratory time spent for each credit hour, based on a minimum 15-week semester. Total classroom laboratory time must include at least 30 hours regardless of the duration of the term.

Workplacement courses, including practicum and internship courses, students are required to spend 60 hours at their work site for each credit hour awarded.

Concentration: A concentration is a sub-specialisation within the field of study of the major. A concentration requires a minimum of 15 credits.

Major: A major is the field of study in which a student specialises. A major requires a minimum of 30 credits.

Minor: A minor is a specialisation outside of the field of study of the major. A minor requires 12-18 credits.

Academic Programme

LP228 Recognition of Prior Learning

1.0 Rationale

Learning is a lifelong activity. The Higher Colleges of Technology (HCT) recognises that students learn in a variety of ways, some of which take place outside the regular classroom or the HCT by granting credit, as appropriate, for prior learning at or outside the HCT, or outside the enrolled programme.

2.0 Terminology

Prior Learning is a process used to evaluate learning acquired outside the classroom for the purpose of assigning academic credit.

3.0 Policy

3.1 A student may obtain credit towards graduation through the recognition of prior learning.

3.2 Credits for prior learning may not be granted to courses which in total exceed

- 50% of the total credential programme credit
- 25% of the final two years of 3 or 4 year credential programmes, and/or
- 25% of the final year of 2 year credential programmes
- Foundation courses cannot be challenged

3.3 Credential students may be given credit for prior learning by:

3.3.1 Exemption (EX)

Courses successfully completed in other HCT programmes

3.3.2 Transfer Credit (TR)

Courses completed at Zayed University or UAE University. Note: Successful completion of UGRU at UAE University or Academic Bridge at Zayed University is accepted for direct entry to an HCT credential (see LP213)

Courses completed at other UAE institutions accredited by CAA

Courses completed at overseas institutions accepted as being of equivalent standing

Qualifications from professional bodies

International programme examinations such as GCSE (UK), International Baccalaureate, etc.

3.3.3 Experiential Learning (EL)

Work or life experience such as structured internships, volunteer work-travel, self-study, or training

3.4 Credit based on prior learning is awarded on the basis of:

System-approved exemptions and transfer credits as posted in HCT Policy or Procedures.

Approval by the campus Associate Dean, on consideration of the recommendation of the appropriate campus Programme Chair and Faculty.

3.5 Prior learning should have occurred within five years of the request for transfer credit.

4.0 Stakeholder Impact and Scope

This policy applies to all students enrolled in credential programmes leading to the award of a Higher Colleges of Technology credential.

5.0 Related Documents

LP213 Inter-institution Student Transfers

LP228.1 Recognition of Prior Learning Procedure

6.0 Approval and Review

Policy Officer: Deputy Vice Chancellor – Academic

Reviewed and Uploaded by (Dept.): Academic Programmes

Approved as Policy by: Vice Chancellor

First Date Published: 30 June 2007

Last Date Reviewed: 16 September 2013

Last Date Published: 16 September 2013

Archive Date:

Note: All policies and procedures are reviewed annually.

LP237 English Language Requirements

1.0 Rationale

This policy governs the English language requirements for all students for the purposes of entry to, progression through, and graduation from credential programs at the HCT.

2.0 Terminology

BAS: Bachelor of Applied Science Program (4-year

credential offered by the HCT)

CEFR/CFR: Common European Framework of Reference. The framework is used by the HCT to compare the English proficiency of students with a common standard.

CEPA: Common Education Proficiency Assessment. Tests developed and supervised by the National Admissions and Placement Office (NAPO) for all 12 year grade students seeking higher education in the UAE.

IELTS: International English Language Testing System. A test of English language proficiency used to satisfy entry requirements to credential programs.

3.0 Policy

Students must meet the relevant English language requirements as set out below:

3.1 Applied Diploma and BAS Programs Entry Requirements:

- CEPA 180, or
- IELTS (Academic Module) overall band 5, or
- an accepted equivalence (see LP237.1).

3.2 Program Progression Standard

Year Four in Education BAS:

All Education BAS students are required to have overall IELTS Band 6.0 to enter the final year of the Education BAS program.

- Bachelor of Education: Early Childhood Education
- Bachelor of Education: Educational Technology
- Bachelor of Education: English Language Teaching in Schools
- Bachelor of Education: Primary Education

4.0 Stakeholder Impact and Scope

This policy applies to all students who seek entry to or are enrolled in HCT credential programs as of the effective date.

The DVCAA shall ensure compliance with this and related policies

Note: All policies and procedures are reviewed annually.

Admission and Enrolment

LP202 Admission Policy

1.0 Rationale

To ensure equitable treatment of applicants, this policy establishes common standards for application, admission, confirmation and placement into programs at the Higher Colleges of Technology.

To implement the Admission Priority Categories for funding students at the federal universities and colleges established by the Ministerial Council for Services Decision No.(6/1/6) of 2013, Session No.(1)

2.0 Terminology

Admission Priority One (First Category): Current High School graduates, continuing students, internal transfers, returning students, and students whose admission or continuation was deferred solely due to National Service.

Admission Priority Two (Second Category): A non-current High School graduate who has never been counted in the funding census at any federal higher education institution.

Admission Priority Three (Third Category): Former students of federal higher education seeking re-admission who are neither admission priority one or two students. This includes students who have graduated previously from federal higher education and wish to return for additional qualifications.

Applicant: An eligible person seeking enrolment at a federal institution of higher education.

Application Cancellation: An application cancelled by the applicant.

Approved: An applicant that NAPO has determined meets the admission criteria for the institution they applied to.

Continuing Student: A federal higher education student who was registered in the previous semester and is also registered in the current semester in the same institution.

Current High School Graduate: An applicant who has successfully completed the UAE Grade 12 Certificate exams to the required standard or hold equivalent qualifications in June of the current year.

Dismissed: A student who has been dismissed from the institution for academic or disciplinary reasons.

Enrolled and Not Registered: A student who was registered in the previous semester, is not registered in the current semester, and did not graduate, get dismissed, suspended or withdrawn.

Enrolled Student: A student who has been approved by NAPO and been enrolled by one of the three federally funded higher education institutions.

Enrolment Cancellation: An enrolment that is cancelled because the student did not register.

Former Higher Education Students: A student who was registered and funded at any federal higher education institution at any time in the past and is currently not a continuing or returning student. This includes completers of qualifications who left higher education and are applying to return for another qualification at a higher level.

Funding Eligible Student: A registered student found by the State Audit Institution during the student count audit to be eligible for federal funding.

Graduate: A student who has successfully completed all the requirements in a program and has been awarded a credential. in the previous semester and is not registered in the current semester.

Internal Transfer Student: A higher education student who was registered in a federal institution of higher education the previous semester, or has had a gap in registration of not more than one year, and is returning to a different institution than the one previously enrolled in.

New Student: A registered student in their first semester of registration following admission. These are tracked by admission priority categories 1, 2 and 3.

Not Approved Applicant: An applicant that NAPO has determined does not meet the admission criteria of the institution they applied to.

Not Enrolled Applicant: An approved applicant who is not enrolled by the higher education institution they applied to.

Not Funding Eligible: A registered student who is not eligible for federal funding as determined during the student count audit.

Non-Current High School Graduate: An applicant who

has successful completed the UAE Grade 12 Certificate exams to the required standard or holds equivalent qualifications prior to the current year, or completed the GSC re-sit exam during a prior academic year. These applicants have not been counted in any prior funding census at any federal higher education institution in the past.

Re-Entry/Returning Student: A higher education student who is returning to the same institution from a gap in registration of not more than one year. The student has had a break in registration of not more than two consecutive regular semesters of study. Fall and Spring are the regular semesters of study. Summer and other short semesters are excluded.

Registered Student: A student who is registered and attending class.

Registration Cancellation: A student whose registration is cancelled because they have exceeded the absence maximum in all courses on the student count audit date.

Suspended/Postponed: A student whose registration has been suspended or postponed for up to one year, either at their own request or as imposed by the institution.

Direct Entry: Admission directly into an HCT credential program.

Minimum Academic Requirements for Program Entry: Minimum levels of proficiency in English and Mathematics.

3.0 Policy

3.1 Admission Requirements

3.1.1 Admission Eligibility Evidence Requirements

UAE Nationals are eligible for admission to the Higher Colleges of Technology (HCT), provided that they meet all of the following four criteria:

1. Possess a valid UAE National ID card, and a valid UAE passport (or other passport if mother is UAE passport holder) if enrolled in a federally funded credential program.

2. Have reached 17 years of age before the start date in the academic year of admission.

3. Possess a valid medical certificate.

4. Have completed the Common Educational Placement Assessment (CEPA English) with a minimum of 150, and have passed the government secondary General School Certificate, (GSC) with a minimum average of 70, OR, have completed the Common Educational Placement Assessment (CEPA English) with a minimum of 160, and have passed the government secondary General School Certificate, (GSC) with a minimum average of 60.

Applicants are required to submit evidence of eligibility to NAPO before being granted admission to HCT.

3.1.2 The admission of an Eligible Applicant is subject to:

- Compliance with the admission procedure as prescribed by the HCT Campus to which the applicant seeks admission.
- Enrolment priority as outlined in GP600 Enrolment Planning Policy and Procedure, and
- Approval by the Chancellor of the HCT.

3.2 Entry into HCT programs is dependent upon the student meeting the minimum academic requirements for program entry. Eligible applicants who do not meet the requirements for HCT programs are placed into Foundations.

3.3 HCT Admission Approval

3.3.1 Approved Applicants are those who have completed the application procedure at NAPO, who meet the HCT general admission and admission priority requirements, (where needed), and who have been approved by the Chancellor of the HCT.

3.3.2 The Chancellor confirms the date of the ceremony at which he approves the applicants list each year.

3.3.3 Approved Applicants must confirm acceptance of the offer of admission by the confirmation deadline listed in the HCT Academic Calendar.

3.3.4 Applicants who confirm acceptance, but are 'no shows' as of the end of the add/drop period in the semester of admission forfeit the offer and must apply for re-admission,

(non-current status), in order to enroll in a subsequent semester.

3.3.5 Inter-Institutional Transfers, re-admissions and non-current applicant approvals will be finalised in order of priority after the confirmation of the approved current applicants.

3.3.6 Admission must be completed before the close of the add/drop period of the relevant semester. 3.4 Enrolment after an Interruption

Students who wish to enrol after an interuption or graduation are classified by their campuses under one of the following statuses. Enrolment holds are placed on all students in the categories below, with the exception of those on deferred status.

Deferral (returning student, Admission Priority Category 1)

Applicable for:

- Students who withdraw from, or fail a course or set of courses in a given semester and must wait to repeat the course or set of courses in a subsequent term.

Note: The deferral can span up to two consecutive semesters, after which a re-enrolment hold is applied. Deferred students who re-enrol before the expiration of the deferral period are not required to apply for re-enrolment. The maximum deferral period is from the semester in which the failure or withdrawal occurred until the add/drop period of the second subsequent semester.

Re-admission (former student Admission Priority Category 3)

Applicable for:

- Students who deferred enrolment but who did not enrol before the expiration of the deferral period, or
- Students withdrawn without deferral in a given semester who did not return to enrolled status in the following semester.
- Students who were awarded an HCT credential and seek another at a higher level and did not return in the following two consecutive semesters

Re-instatement (returning student Admission Priority Category 1 or former student, Admission Priority Category 3)

Applicable for:

- Students who previously were required by their college to withdraw without deferral from their program, for academic or other reasons and have applied to resume their studies.

Approvals for enrolments after an interruption are confirmed in order of priority, as defined in GP600 Enrolment Planning Policy and Procedure.

4.0 Stakeholder Impact and Scope

This policy applies to all applicants who seek admission into the System of the HCT.

The DVCAA shall ensure compliance with this and related policies

LP239 Foundations Studies Policy

1.0 Rationale

The purpose of this policy is to govern admission, placement, progression and completion for Foundations Studies at all campuses.

The Foundations Intensive Program was developed to better serve the mission of the Higher Colleges of Technology, the demands of industry, and the workforce requirements of the UAE. It FIP aims to place all qualified and dedicated students into a degree program within one year from date of entry.

The academic year of the Foundations Intensive Program consists of five cycles. Students are initially placed into one of four Levels of ability, and have an opportunity to progress to the next level at the end of each cycle (Table 1).

2.0 Terminology

CEFR: The Common European Framework of Reference for Languages is used by the HCT to compare the English proficiency of students with a common standard.

Foundations Length of Placement: based upon the level of placement, the number of cycles required for a student to complete Foundations.

3.0 Policy

3.1 Admission

Students who meet eligibility requirements for admission to HCT but do not meet entrance requirements for a Bachelors Program according to HCT Admission Policy (LP202) may be placed into the Foundations Program.

3.2 Placement

Foundations students are placed into one of four levels of English (and into mathematics courses, if needed), according to LP202 Admission Policy and related procedures. Each English and Mathematics course is designed to be completed in one cycle.

3.3. Length of Placement

There is no limit to the number of times a student may repeat a given level up to the total duration limit of 5 cycles. Even students who do not progress to a higher level during the year will be afforded a maximum of 5 cycles (1 year) to achieve the IELTS score necessary for degree program entry.

3.4 Assessment

All Foundations courses have a Final Exam and/or Practical Skills Assessment which is common to all Colleges. The rest of the final course grade is based on coursework tasks assigned by the Colleges within the parameters of the Course Outline Assessment Strategy.

3.5 English Progression

Progression occurs only at the end of each cycle. In Levels 1, 2 and 3, in order to progress to the next level, a student must achieve an overall course grade of 60% or higher. If the student achieves a course grade of 85% or higher, the student may progress two levels (e.g. from Level 1 to Level 3, or Level 2 to Level 4). This is known as "Exceptional Progression." Only students in Level 1 and Level 2 can progress via Exceptional Progression; students in Level 3 and Level 4 cannot.

Level 4 students must achieve the BAS entry requirements in order to enter a BAS program.

If a student does not meet the criteria for progression at the end of the cycle, the student must repeat the same level during the next cycle.

3.5.1

Table 1: Expected CEFR:

CEPA Entry	Level	Expected CEFR at Entry	Expected CEFR for Progression
Below 156	1	A1-A2	A2+
156	Level 2	A2+	B1
163	Level 3	B1	B1+
170	Level 4	B1+	B2
180	BAS	B2	--

3.6 Completion

After placement in the Foundations Studies Program, students may complete the program at any level by satisfying the expected CEFR for BAS entry (see Table 1). Admission to the BAS program is contingent upon satisfying program entry requirements (see LP202 and LP202.1).

4.0 Stakeholder Impact and Scope

This policy applies to all students wishing to gain entry to a Bachelors Program via the Foundations Studies Program. However, certain Bachelor Programs may have additional entry requirements.

The DVCAA shall ensure compliance with this and related policies

Registry

LP205 Duration of Study

1.0 Rationale

It is common practice for higher education institutions to require that work towards a particular credential or major be achieved within a set period of time, because knowledge in particular fields changes, and learning often involves building knowledge from idea to idea and from course to course. It is also important that students progress through programs in a timely manner for practical resource reasons.

2.0 Terminology

Duration of Study: The maximum time a student is allowed to complete a particular program or major.

3.0 Policy

A student is required to complete his/her study at the HCT within the allowed Duration of Study.

Once enrolled in a credential program, a student is allowed an additional four consecutive semesters, excluding summer sessions, above the program length stated in the student's Catalogue Term, in which to complete his/her studies. Program length plus the additional four semesters equals the Duration of Study. This also applies to students who are reinstated after academic dismissal.

Duration of Study for the Foundations Intensive Program is one year.

A student will be subject to dismissal upon academic grounds if he/she exceeds the Duration of Study without being granted an extension.

A student with extenuating circumstances that will require him or her to exceed the Duration of Study may apply for an extension. The application must be submitted no later than 3 months prior to the end of the Duration of Study period, and, if granted, the extension period begins in the semester immediately following the end of the normal Duration of Study. An extension is normally limited to two consecutive semesters. A student may apply for an extension only once.

The Duration of Study period allowed for inter-institution transfer students will be determined on an individual basis.

4.0 Stakeholder Impact and Scope

Program Chairs, Executive Deans, Student Advisors and Faculty, in advising students who are deferred, re-enrolled, re-instated, or re-admitted need to be aware of the policy and advise accordingly.

Student sponsors should be informed students may not be able to graduate if they do not complete their program within the Duration of Study.

The DVCAA shall ensure compliance with this and related policies

LP208 Academic Standing – Undergraduate Programmes

1.0 Rationale

To enhance and maintain the integrity of the HCT credential and to be consistent with academic probation and academic dismissal polices common in higher education.

2.0 Terminology

Academic Dismissal: Termination from HCT for academic reasons.

Academic Standing: An indicator of a student's progress in a program, normally based on Grade Point Average (GPA).

3.0 Policy

3.1 Credit Bearing Courses and Programs

1. A minimum Cumulative GPA of 2.0 is required for graduation. Appeals to the GPA graduation requirement will not be accepted.

2. A student is in good academic standing if s/he maintains a program grade point average of 2.0 or higher.

3. A student is placed on academic warning if his/her semester grade point average is below 2.0 but his/her Cumulative grade point average is above 2.0.

4. A student is placed on academic probation if his/her Cumulative grade point average falls below 2.0. The student then has two further semesters on

academic probation to attain a Cumulative grade point average of 2.0 and return to good academic standing.

5. If a student does not attain a Cumulative grade point average of 2.0 after two semesters on academic probation, s/he is subject to academic dismissal.

6. If a student does not attain a program grade point average of 2.0 at the end of his final semester of studies, s/he is subject to academic dismissal and will not qualify for graduation.

7. If a student seeks to transfer to another program while on academic warning or academic probation, s/he has two semesters in the new program to attain a Cumulative grade point average of 2.0. If s/he does not achieve a Cumulative grade point average of 2.0 at the end of the second semester of the new program, s/he is subject to academic dismissal.

8. Students who receive a course grade with less than 2.0 grade points may be permitted to repeat the course once. In extenuating circumstances including serious illness or family issues, students may appeal to Deputy Vice Chancellor, Academic to repeat the course twice.

3.2 Non-Credit Bearing Courses and Programs (Foundations)

1. In programs which do not bear credit, required courses must have a passing grade in order for a student to progress.

2. A student who receives a grade of F must repeat the course.

3. There is no limit to the number of times a student may repeat a given level up to the total duration limit of 5 cycles. Even students who do not progress to a higher level during the year will be afforded a maximum of 5 cycles (1 year) to achieve the IELTS score necessary for degree program entry.

4. Learning Contracts are not permitted at the HCT.

4.0 Stakeholder Impact and Scope

Academic Services at HCT Colleges need to identify and categorise students to whom this policy applies.

Students and sponsors should be informed that students may not be able to graduate or will be withdrawn from a program if they do not meet the requirements under this policy.

The DVCAA shall ensure compliance with this and related policies.

LP209 Grading System

1.0 Rationale

The grading system is designed to achieve consistency with broad international practice. The numerical consistency across all grades will also ensure validity in statistical analysis.

2.0 Terminology

Cumulative Grade Point Average (CGPA): A numerical value derived from final grades on all courses attempted within a credential. It is calculated based on all courses completed in the program major which count towards program compliance requirements and are not excluded from GPA calculation.

Grade Point Average (GPA): A numerical value derived from final grades on all courses attempted which is recorded on the student's transcript.

Grade Report: An unofficial transcript that shows the student's grades in all courses taken to date.

Semester GPA: The semester grade point average is based on all courses attempted within a semester, excluding experiential learning courses (e.g., , courses graded P/F, advanced standing grades (CH. EX, TR) and grades with an asterisk (*).

Successful Completion of Course: When a student has demonstrated, through the assessment methods prescribed by the course instructor, achievement at the minimum level defined for the course based on the HCT Grading policy, of all the learning outcomes which make up a course.

Transcript: An official report issued to other educational institutions, and/or employers, that shows the student's grades in all courses taken to date.

3.0 Policy

3.1 Students enrolled in courses in HCT programs will be reported in terms of the following grades. The grade point average (GPA) is tabulated at the end of every semester based on the following grading system.

Descriptor	Grade	Grade Points	Range
Achievement that is outstanding relative to the course and GPA requirements.	A	4	90 – 100
	A-	3.7	87 – 89
Achievement that is significantly above the course and GPA requirements.	B+	3.3	84 – 86
	B	3	80 – 83
	B-	2.7	77 – 79
Achievement that satisfactorily meets the course and GPA requirements.	C+	2.3	74 – 76
	C	2	70 – 73
Achievement that minimally meets the course requirements but may not meet the GPA requirements.	C-	1.7	67 - 69
	D+	1.3	64 - 66
	D	1	60 – 63
Achievement that does not meet requirements.	F	0	0 – 59
A letter grade (A-F) followed by an asterisk is not computed in the GPA.	grade*	N/A	Uncalculated
Achievement that meets the course requirements, in courses graded pass/fail, but is not computed in the GPA.	P	N/A	Pass
Achievement that does not meet course requirements, in courses with pass/fail grading mode.	FL	N/A	Fail
A notation that indicates a course is taken without credit.	AU	N/A	Audit
A notation that indicates a course which is more than a semester in length, is continuing.	CC	N/A	Continuing Course
A notation that indicates a student has been granted credit.	CH	N/A	Challenge
A notation that indicates a student has been granted credit based on work or life experience, such as structured internships, volunteer work, travel, self-study, or training.	EL	N/A	Experiential Learning
A notation that indicates the student has been exempted from a course requirement on the basis of equivalent attainment other than transfer credit.	EX	N/A	Exemption
A temporary grade that indicates the student has not completed all course requirements for medical reasons, or for extenuating personal circumstances such as bereavement.	I	N/A	Incomplete
A notation that indicates the student is currently enrolled in the course.	IP	N/A	In Progress
A notation that indicates that no final grade will be recorded for the course.	NG	N/A	Not Gradable
A temporary notation that is assigned if the grade is not submitted by the last day of the semester.	NS	N/A	Not Submitted
A notation that indicates the student has been granted credit for equivalent courses at another accredited institution.	TR	N/A	Transfer Credit
A notation that indicates the student did not meet all learning outcomes.	U	N/A	Unclassified
A notation that indicates the student has withdrawn during the time period allowed for withdrawal without penalty.	W	N/A	Withdrawal

3.2 A course in which grade A, A-, B+, B, B- , C+, C, C-, D+, D, P, CH, EL, EX, or TR is received is counted towards program compliance requirements.

3.3 Notations AU, CC, CH, EL, EX, I, IP, NG, NS, P, TR, U and W carry no grade points and are excluded from all grade-point computations.

3.4 An I grade may be assigned if the performance in a course is satisfactory, and has been of passing quality but is incomplete for reasons beyond the student's control, e.g. medical or personal extenuating circumstances.

3.5 All grades except I, IP, and NS are considered final.

3.6 In exceptional circumstances, a grade may be changed as a result of re-evaluation of the student's work if the appeal is made and approved within six months of the original grade submission.

3.7 Under no circumstances will a grade be changed after six calendar months has passed from the date of entry of the original grade, unless to correct an institutional error.

3.8 Where the HCT grading system and/or grade change regulations are inconsistent with that required by the accreditation body for a specific program, the grading system of the accreditation body takes precedence over the HCT grading system.

4.0 Stakeholder Impact and Scope

All students, faculty, program managers and Academic Services staff need to be aware of the grading system.

New students need to be informed of the grading system when joining the HCT.

LP234 Graduation Policy

1.0 Rationale

To define the policy and framework for all matters relating to HCT's graduation requirement, including academic requirements, Graduation Ceremony and awards.

2.0 Terminology

Awards, Scholarships and Memberships: Awards, Scholarships and Memberships are awarded to students and graduates who demonstrate excellence in particular spheres.

Graduate: A student who has successfully completed all the requirements in a programme and has been awarded a credential.

Graduation Eligibility Period: The period within which a student is eligible to graduate and to participate in the HCT official graduation ceremony. This period starts on the first day and ends on the last day of each academic year, including the optional summer session.

Potential Graduates: All students who are registered in courses in the final semester of their programme, and are subject to passing these courses and meeting all graduation requirements will be eligible to graduate.

Student Self Service: The Student Self-Service system on the HCT web-based College management and record system through which students access their academic information.

3.0 Policy

- It is the responsibility of the Student Records Custodian to identify all potential graduates to the System Registrar.

- To qualify for a Higher Colleges of Technology credential, a student is required to successfully complete the required number of credits and courses specific to the programme major of the programme in which the credential is sought. The student is also required to meet the English language international benchmark standards for that program, where applicable, to achieve a minimum cumulative GPA of 2.0 for a Bachelor's degree or a minimum cumulative GPA of 3.0 for a Master's degree, and, where applicable, provide proof of UAE nationality status as outlined in the procedure. Appeals to the GPA graduation requirement will not be accepted.

- Residency Requirement: A minimum of 50% of the programme credit requirements must be completed at the Higher Colleges of Technology. Courses taken while enrolled in another programme at HCT, but which did not lead to the award of a credential, will be accepted as contributing to the residency requirement.

- A student will graduate from the HCT College at which the programme is completed.

- Graduates are eligible to participate in an official Graduation Ceremony. Eligible graduates will be invited to the ceremony.

• Once the graduation award is made, no change in the credential title or name of the awardee is permitted. A graduate may apply for one replacement of lost or damaged credential documentation for a prescribed fee.

• Graduates are eligible for awards, scholarships and memberships.

• Grade changes made after the end of the graduation eligibility period, resulting from supplemental and alternative assessments being conducted outside the timeframe specified in the Academic Calendar, may delay the student's graduation to the following academic year.

4.0 Stakeholder Impact and Scope

College Directors, as Student Records Custodians, need to be aware of their responsibilities to ensure processes are in place to identify all potential graduates.

Academic and Student Services in HCT Colleges need to put in place processes and procedures to inform students in the final year of their studies to apply for graduation.

Programme Chairs need to be proactive in providing advice to students in the final year regarding any program non-compliance issues.

Student Support Services

LP201 Academic Honesty

1.0 Rationale

The Higher Colleges of Technology (HCT) is committed to creating a learning environment that is honest and ethical. This policy is made with the awareness that students come from a variety of academic backgrounds where understanding of academic honesty and ethical principles varies. It is also understood that the HCT operates in a global environment where principles of academic honesty are challenged by technology and the availability of easy opportunities for dishonest practices.

2.0 Terminology

Academic Honesty: An expectation that students will conduct their academic activities fairly and honestly with particular emphasis on avoiding cheating and plagiarism.

Cheating: A deliberate attempt to gain marks or academic credit dishonestly, or helping someone else to gain marks or academic credit dishonestly.

Plagiarism: Deliberately presenting another person's work as one's own without acknowledging the original source.

3.0 Policy

Students are required to refrain from all forms of academic dishonesty as defined and explained in HCT procedures and directions from HCT personnel.

HCT College Personnel - Faculty, Academic Supervisors, Heads and Directors - are responsible for ensuring that students understand their responsibilities associated with academic honesty and the disciplinary measures, which will be imposed for failing to meet these responsibilities. They are also responsible for carrying out the appropriate investigative and disciplinary procedures.

A student found guilty of having committed acts of academic dishonesty may be subject to one or more of the disciplinary measures as outlined in Article 33 of the Student and Academic Regulations.

4.0 Stakeholder Impact and Scope

This policy applies to all students enrolled in programs at the HCT.

Faculty, Program Chairs, Executive Deans and College Directors are responsible for explaining this policy to all students and to ensure that students understand the HCT definition for academic dishonesty, are aware of the types of behaviour that will be considered as a breach of conduct, understand their responsibilities related to academic honesty, are aware of the disciplinary measures that could be imposed in cases of breach of conduct and the consequence of a permanent record on the student transcript.

LP216 Misconduct, Non-Academic

1.0 Rationale

In the interests of promoting welfare and safety of students and staff and the good reputation of the organisation, the Higher Colleges of Technology has established standards of conduct that aim to deal with allegations of student misconduct.

2.0 Terminology

Disciplinary Dismissal: Termination from the HCT for non-academic reasons

Suspension: A required temporary absence from the HCT

3.0 Policy

- While on, approaching, or leaving HCT campuses or HCT sponsored or supervised events, students are subject to disciplinary action for misconduct in relation to person, property, orderly processes of the HCT, or other types of misconduct as may be prescribed in HCT regulations, policies or procedures.
- An allegation of non-academic misconduct may be brought against any student by HCT staff, student, or an external person with an association with the HCT.
- HCT College Directors are required to adhere to the procedures associated with this policy in dealing with allegations of Non-Academic Misconduct.
- The following disciplinary sanctions, listed in order of severity, may be applied to misconduct in relation to the person, misconduct in relation to

property, and misconduct in relation to the orderly processes of the HCT with the authority of the HCT College Director. Where appropriate, more than one sanction may be imposed.

- **Warning**: Written warning that continuation or repetition of conduct found wrongful, within a period of time stated in the warning, may be cause for more severe disciplinary action.
- **Restitution**: Monetary reimbursement for damage to or misappropriation of property. This may take the form of appropriate service or other monetary compensation.
- **Interim Suspension**: A student may be immediately excluded from classes and other HCT activities when the student's continued presence on the campus constitutes a danger, or threat of danger, to property, the student, or others.
- **Disciplinary Probation**: Disciplinary probation shall have as its purpose the rehabilitation of the student and may include suspension of specified privileges for a definite period not to exceed the remaining duration of the semester in which the misconduct is committed plus one additional semester. The student may be required to attend counselling sessions.
- **Disciplinary Suspension**: Exclusion from classes and other HCT privileges and activities as set out in the order after a hearing, for a definite period not to exceed the remaining duration of the semester in which the misconduct is committed plus one additional semester. The conditions of re-enrolment shall be stated in the order of the suspension.
- **Disciplinary Dismissal**: Termination of student status.
- **Cancellation of Credential Awarded**

- A student alleged to have committed misconduct in relation to person, property, and/or the orderly processes of the HCT is entitled to a hearing according to HCT procedures.
- Disciplinary sanctions for misconduct in relation to orderly processes of the HCT apply to enrolled students and may extend to HCT graduates and former students.
- No complaint may be filed against a student if more than six months has elapsed since the occurrence of the alleged misconduct in relation the person or property, with the exception of misconduct in relation to the orderly process of the HCT which shall have no limitation.
- Students or applicants who gain admission to the HCT through false information may have their student status cancelled by the System Registrar in consultation with the HCT College Director.

4.0 Stakeholder Impact and Scope

This policy applies to all students of the HCT, and to conduct occurring on any HCT campus, or facilities owned or occupied by the HCT, and at any events or activities conducted under the name and auspices of the HCT, such as field trips, excursions, and educational or work placements with outside organisations.

College Directors, Deans, and Program Chairs, College Academic and Student Services staff are responsible for explaining this policy to all students and ensure students understand the HCT definition for non-academic misconduct, the types of behaviour that will be considered as a breach, and ensure students understand their responsibilities, the disciplinary measures, and the consequences.

LP218 Student Rights and Responsibilities

1.0 Rationale

This outlines the basic standards expected of students at the HCT and the basic rights that students, potential students and former students are entitled to, from the Higher Colleges of Technology. In administering rights and responsibilities, the Higher Colleges of Technology Management has the well-being of students and the promotion of their education at the forefront.

2.0 Terminology

3.0 Policy

1. All HCT students, whilst enrolled, have the following rights:

a. To appropriate opportunities for learning to

pursue the educational goals of their courses.

b. To have opportunities to discuss and express any views which are relevant to the subject matter of courses and which are not contrary to the religious, political, cultural and moral values of the UAE.

c. To the reasonable use of campus facilities.

d. To join appropriate campus organisations and engage in recreational activities, subject to reasonable conditions which may be imposed to regulate the timeliness of requests, the appropriateness of the space assigned and time of use, and to ensure proper maintenance of the facilities.

e. To privacy and not to have their photographic image taken or published without consent, other than in official HCT publications.

2. All HCT students, potential students, and former students, have the following rights:

a. To freedom from discrimination based on disability.

b. To security for their persons on the HCT campuses.

c. To confidentiality with regards to their views, beliefs, and political associations expressed in the course of instruction, advising, or counselling, unless disclosure is authorised by written consent.

d. To exemption from disciplinary action that affects their status as students except for academic discipline, and discipline under rules and regulations that shall be fully and clearly disclosed in advance of alleged violations.

e. To clear notice of the nature and cause of any disciplinary charges, and the right to an impartial hearing.

3. All HCT students have the following responsibilities:

a. To direct their efforts toward learning the content of all courses in which they are enrolled.

b. To participate fully in classroom learning activities.

c. To engage with their best efforts in all assignments and assessment activities and to submit these as prescribed by the instructor or other staff of the HCT.

d. To participate fully in educational activities outside the classroom, such as field trips, that form part of a course in which the student is enrolled.

e. To contribute to the best of their abilities to creating an environment that is conducive to the educational objectives of the HCT.

f. To uphold the good name of the Higher Colleges of Technology as an organisation and as a community and the reputation of all its staff and students, in any communications within or outside the HCT.

4. Any of the disciplinary sanctions as published in the Academic and Student Regulations may be imposed on the student for breach of student responsibilities.

4.0 Stakeholder Impact and Scope

This policy applies to all students enrolled in programmes, and where explicitly stated, to potential and former students.

Programme Chairs and Associate Deans at HCT colleges are responsible for explaining this policy to all students and for ensuring students understand their rights and responsibilities, the types of behaviour that will be considered a breach, and the consequence.

LP235 Student Complaints Policy

1.0 Rationale

The Higher Colleges of Technology (HCT) is committed to ensuring that all students have a positive educational experience whilst enrolled at HCT, and that the workplace culture embraces accountability and opportunities for continual improvement. The student complaints policy and procedures are established to handle student complaints effectively and efficiently to ensure students' positive experience and staff accountability are maintained.

2.0 Terminology

Student Complaint: An expression of dissatisfaction made by an enrolled student to the Higher Colleges of Technology. The dissatisfaction may concern academic

or non-academic matters relating to HCT staff, programmes, policies, rule, regulations, processes, or the complaints-handling process itself, where the student expects a resolution.

Complaints Management: A structured process for receiving, recording, investigating and responding to complaints.

3.0 Policy

3.1 The Dean of Student Services will allocate appropriate levels of resources to establish a complaints management process that ensures student complaints are addressed in an equitable, objective and unbiased manner, and that the complainant receives an appropriate response in a timely manner.

3.2 Detailed procedures for managing student complaints must be established at HCT colleges, in accordance with the HCT principles and guidelines for student complaints management, and published. The procedures must include:

3.2.1 The mechanisms by which student complaints are to be recorded and filed;

3.2.2 The timescales for investigating the complaint and responding to the student;

3.3.3 The name of the staff who need to be notified, internally and externally, about different types of complaints;

3.3.4 The name of the person at the college responsible for handling complaints of academic nature, and non-academic nature;

3.3.5 The circumstances in which complaints should be escalated within the college;

3.3.6 The circumstances in which no action will be taken on complaints or communication with a complainant will cease;

3.3.7 Guidelines on appropriate remedies for staff handling student complaints.

3.3 A document, print or electronic, detailing the complaints process, and containing information on how to make a complaint and how the complaint will be resolved must be available to all students, staff, and interested parties at Student Services on request, in English and Arabic.

3.4 The Dean of Student Services will establish who is accountable within the college for responding to complaints, deciding on action, and reporting on these actions and decisions.

3.5 Information relating to student complaints form part of the official student record and must be kept in the official student record system as administrative records and be kept confidential.

4.0 Stakeholder Impact and Scope

This policy and related procedures apply to enrolled, deferred, dismissed, suspended, withdrawn, former students and graduates. Conflicts between students are dealt with under the HCT Code of Student Conduct and the Non-Academic Misconduct policy.

It is recognised that local conditions differ at individual colleges, however, this policy obliges all colleges to manage student complaints in a manner that gives optimal results for both the student and the college.

Awards

Graduation Awards

Students graduate with Distinction, Distinction with Honours or Distinction with Highest Honours, provided they meet the following criteria in their programme or major, maintained at the individual campuses:

- Distinction: a Cumulative GPA between 3.50 and 3.74;
- Distinction with Honours: a Cumulative GPA between 3.75 and 4.00;
- Distinction with Highest Honours: highest Cumulative GPA system-wide, provided the Cumulative GPA is between 3.75 and 4.00.

The achievement of 'Distinction', 'Distinction with Honours' and 'Distinction with Highest Honours' will be noted on the student's credential and transcript. If more than one student achieves the highest GPA in an individual programme major, then the appropriate number of awards will be made.

The Executive Dean's List

Students who achieve a Grade Point Average of 3.50 or above shall be placed on the Executive Dean's List for their Division.

Students in good standing on programmes who achieve a Grade Point Average of 3.50 or above in any semester while taking at least 15 credit units of classes are placed on the Executive Dean's List.

Records of the Executive Dean's List are published and maintained on each campus.

Abu Dhabi Industry Awards

The Abu Dhabi Industry Awards are awarded to top HCT graduates. Nominees for this award are in the top 10% of the graduating class in each of the following aspects:

- graduation GPA (grade point average);
- grades in graduation project and work placement;
- attendance record in the final year of their programme; and
- contributions to campus activities and community.

Company Awards

Graduates may also be eligible for a variety of other awards sponsored by specific companies. For details of these, students should contact their programme Dean.

Programmes

Applied Communications

The Applied Communications Division produces graduates with a strong foundation in theoretical and practical aspects of numerous media fields including television/radio broadcasting, journalism, design, multimedia, corporate communications, events management, and photography. They will be capable of applying critical and creative approaches to the application of conceptual production and technical skills, so as to achieve the highest professional standards in a rapidly evolving media industry. Graduates will develop the skills required to be self-learners through being exposed to a range of learning opportunities.

Applied Communications provides a blended learning environment which is student-centred and project-based; where practical project work is conceptualised and supported by theoretical knowledge. Learning will be accomplished through a variety of means including, but not limited to, lectures, student research, discussions, workshops, guest speakers, and industry visits. Upon graduating from the Division's programmes, students will have achieved transferable knowledge and skills appropriate to industry standards. They will also have communication skills which allow them to operate in a broad range of professional environments.

Bachelor of Applied Science in Applied Communications

Delivered in a rich technology environment and collaboration with the industry, the Applied Communications Programme trains students in the areas of Corporate Communications, Video Production, Graphic Design, Animation, and Fashion Design. Learning takes place in well-equipped studios and labs using state-of-the-art equipment. The transition from college into employment is further enhanced through a well-structured work based learning programme. Graduates are capable of applying creative and critical thinking skills to achieve the highest professional standards in rapidly evolving media, design and communications industries in the region and beyond.

* CLICK HERE or go to page 122 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Applied Media Major

This generic major allows students to select available courses from the specialised Media and Design and Communications streams to help them build skills, knowledge and competencies that will enable them to take up a range of roles within the creative industries. The Applied Media major, reflecting the changing demands of the industry prepares students to multi-skill in a multiplatform media environment.

Animation Major

This major is designed to produce graduates who can function effectively within the design industry; specifically focusing on the rapid growth in animation. The curriculum includes: 2D hand-drawn animation; 3D character animation; stop-motion; experimental animation; and creative visual effects. The knowledge and skills achieved through this major enable students to gain employment with the rapidly growing interactive, gaming, animation and film industries in the region.

Corporate and Media Communication Major

This major provides students the skills, knowledge and competencies required to meet the challenges of the nationally developing discipline of corporate communication and the rapidly changing discipline of media communication. Students will gain a strong foundation in the areas of social media, media relations, public relations, crisis communication, corporate social responsibility and digital broadcasting.

Fashion Design Major

This major is designed to produce graduates with a fundamental set of fashion design and business skills. This major provides students the knowledge and skills in textiles, draping, tailoring, pattern making and CAD designing, using a range of software and design techniques. The skills, knowledge and competencies students gain will enable them to meet the requirements of a variety of areas within the design, merchandising and retailing areas of the fashion industry in the region.

Graphic Design Major

This major provides students with the skills, knowledge and competencies to function effectively in design industries. This programme will cover design processes and print design, typography, illustration, electronic media – the web – magazine, prepress design, packaging, advertising and branding suitable for a range of media organisations. The knowledge, skills and competencies gained through this major will enable students to gain employment in both print and digital design within the publishing, advertising and marketing industries in the region.

Video Production Major

This major provides students the skills, knowledge and competencies to function effectively within the expanding discipline of video production. Students will be able to create original works in narrative and documentary formats and become proficient in all aspects of writing, directing, producing, lighting, camera operation and editing of video productions. The skills and knowledge achieved through this major enable students to fit into different roles in media production within a range of private, public and non-profit organisations.

Bachelor of Applied Science in Applied Communications

Common Courses

Applied Communication Core Courses		Course Credits
Required Credits: 45		
COM 1003	Digital Storytelling	3
COM 1103	Introduction to Mass Communication	3
COM 1113	Drawing	3
COM 1123	Introduction to Media Technology	3
COM 1133	Visual Communication	3
COM 1203	Photography	3
COM 1223	History of Media and Design	3
COM 2103	Creative Writing	3
COM 2313	Project Management for Media	3
COM 2323	Media Education	3
COM 2403	Web Development	3
COM 2413	Portfolio and Presentation Skills	3
COM 3513	Media Skills in Arabic	3
COM 4806	Learning in the Workplace	6

Applied Communication 2000 Elective Courses		Course Credits
See Programme Chair for available courses		
Required Credits: 12		
CDA 2303	Principles of Animation I	3
CDF 2303	Fashion Drawing	3
CDG 2303	Introduction to Graphic Design	3
CMC 2303	Corporate Communication I	3
CMM 2303	Introduction to Media Communication	3
CMV 2303	Introduction to Video Production	3

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	6

Majors

Applied Media Major 3000 Level Electives		Course Credits
See Programme Chair for available courses Major code: CAM		
Required Credits: 15		
CDA 3503	Storyboarding	3
CDA 3513	Character Design	3
CDA 3523	Principles of Animation II	3
CDA 3603	3D Modelling	3
CDA 3613	Multimedia Scripting	3
CDG 3503	Typography I	3
CDG 3513	Introduction to Design Illustration	3
CDG 3603	Typography II	3
CDG 3623	History of Graphic Design	3
CMC 3503	Social Media	3
CMC 3603	Media Relations	3
CMC 3613	Corporate Communication II	3
CMC 3633	Digital Broadcasting	3
CMV 3503	Editing	3
CMV 3513	Production Skills I	3
CMV 3523	Video Production I	3
CMV 3553	Video Production II	3

Applied Media Major 4000 Level Electives and Project		Course Credits
See Programme Chair for available courses Major code: CAM		
Required Credits: 18		
CDA 4703	3D Animation	3
CDA 4713	Film Analysis and Narrative Structure	3
CDA 4723	Animation Scripting	3
CDA 4803	VFX, Audio, Editing, Compositing	3
CDG 4703	Studio II	3
CDG 4713	Packaging Design	3
CDG 4723	Sustainable/Social Design	3
CDG 4803	Photography for Graphic Design	3
CMC 4623	Communication Theory	3
CMC 4703	Public Relations	3
CMC 4713	Media Law and Ethics	3
CMV 4103	Production Skills II	3
CMV 4606	Short Video	6
CMV 4803	Advanced Edit and Effects	3
CDA 4806	Final Project - Animation	6
CDG 4806	Final Project - Graphic Design	6
CMC 4806	Final Project - Corporate and Media Communiction	6
CMV 4806	Final Project - Video Production	6

Animation Major		Course Credits
Major code: CDA		
Required Credits: 33		
CDA 3503	Storyboarding	3
CDA 3513	Character Design	3
CDA 3523	Principles of Animation II	3
CDA 3603	3D Modelling	3
CDA 3613	Multimedia Scripting	3
CDA 4703	3D Animation	3
CDA 4713	Film Analysis and Narrative Structure	3
CDA 4723	Animation Scripting	3
CDA 4803	VFX, Audio, Editing, Compositing	3
CDA 4806	Final Project - Animation	6

Corporate and Media Communication Major		Course Credits
Major code: CCM		
Required Credits: 33		
BUS 3003	Managing People and Organisations	3
CMC 3503	Social Media	3
CMC 3603	Media Relations	3
CMC 3613	Corporate Communication II	3
CMC 3623	Media and Society	3
CMC 3633	Digital Broadcasting	3
CMC 4623	Communication Theory	3
CMC 4703	Public Relations	3
CMC 4713	Media Law and Ethics	3
CMC 4806	Final Project - Corporate and Media Communication	6

Fashion Design and Merchandising Major		Course Credits
Major code: CDF		
Required Credits: 33		
CDF 3503	Fashion Design and Textile	3
CDF 3513	Fashion Draping and Pattern Making	3
CDF 3523	Fashion Design and Technology I	3
CDF 3603	Fashion Design and Trend Research	3
CDF 3623	Fashion Design and Technology II	3
CDF 4703	Fashion Design and Production	3
CDF 4713	Fashion and CAD Design	3
CDF 4723	Fashion Marketing	3
CDF 4803	Fashion Merchandising	3
CDF 4806	Final Project - Fashion Design	6

Graphic Design Major		Course Credits
Major code: CDG		
Required Credits: 33		
CDG 3503	Typography I	3
CDG 3513	Introduction to Design Illustration	3
CDG 3603	Typography II	3
CDG 3613	Studio I	3
CDG 3623	History of Graphic Design	3
CDG 4703	Studio II	3
CDG 4713	Packaging Design	3
CDG 4723	Sustainable/Social Design	3
CDG 4803	Photography for Graphic Design	3
CDG 4806	Final Project - Graphic Design	6

Video Production Major		Course Credits
Major code: CMV		
Required Credits: 33		
CMV 3503	Editing	3
CMV 3513	Production Skills I	3
CMV 4103	Production Skills II	3
CMV 4606	Short Video	6
CMV 4709	Documentary and Video Production	9
CMV 4803	Advanced Edit and Effects	3
CMV 4806	Final Project - Video Production	6

Total Required Credits	*120*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*COMAB*
Industry Sponsored Programme	*No*		

Ideal Semester Plan

Common Courses

The first two years of the Bachelor of Applied Science in Applied Communications are common. Majors are listed separately below.

		Course Credits
Year 1 Semester 1		
Required Credits: 15		
AES 1013	Arabic Communications I	3
COM 1103	Introduction to Mass Communication	3
COM 1113	Drawing	3
COM 1123	Introduction to Media Technology	3
LSC 1103	Academic Reading and Writing I	3

		Course Credits
Year 1 Semester 2		
Required Credits:15		
COM 1003	Digital Storytelling	3
COM 1133	Visual Communication	3
COM 1223	History of Media and Design	3
LSM 1123	Quantitative Reasoning	3
LSC 1503	Academic Spoken Communication	3

Year 2 Semester 3		
Required Credits: 15		
COM 1203	Photography	3
COM 2103	Creative Writing	3
COM 2313	Project Management for Media	3
Media Communications 2000 level elective course		3
Media Communications 2000 level elective course		3

Year 2 Semester 4		
Required Credits: 15		
COM 2323	Media Education	3
COM 2403	Web Development	3
COM 3513	Media Skills in Arabic	3
Media Communications 2000 level elective course		3
Media Communications 2000 level elective course		3

Applied Media Major

Year 3 Semester 5		
Required Credits: 15		
AES 1003	Emirati Studies	3
COM 2413	Portfolio and Presentation Skills	3
LSC 2103	Academic Reading and Writing II	3
Media Communications 3000 level elective course		3
Media Communications 3000 level elective course		3

Year 3 Semester 6		
Required Credits: 15		
LSN 1113	Introduction to Sustainability	3
LSS 1003	Life and Study Skills	3
Media Communications 3000 level elective course		3
Media Communications 3000 level elective course		3
Media Communications 3000 level elective course		3

Year 4 Semester 7		
Required Credits: 15		
COM 4806	Learning in the Workplace	6
LSS 2533	Research Methods	3
Media Communications 4000 level elective course		3
Media Communications 4000 level elective course		3

Year 4 Semester 8		
Required Credits: 15		
AES 3003	Professional Arabic	3
Media Communications 4000 level elective course		3
Media Communications 4000 level elective course		3
Media Communications Final Project		6

Animation Major

Year 3 Semester 5		
Required Credits: 15		
AES 1003	Emirati Studies	3
CDA 3503	Storyboarding	3
CDA3513	Character Design	3
COM 2413	Portfolio and Presentation Skills	3
LSC 2103	Academic Reading and Writing II	3

Year 3 Semester 6		
Required Credits: 15		
CDA3603	3D Modelling	3
CDA 3613	Multimedia Scripting	3
CDA 3523	Principles of Animation II	3
LSN 1113	Introduction to Sustainability	3
LSS 1003	Life and Study Skills	3

Year 4 Semester 7		
Required Credits: 15		
CDA 4723	Animation Scripting	3
CDA 4713	Film Analysis and Narrative Structure	3
COM 4806	Learning in the Workplace	6
LSS 2533	Research Methods	3

Year 4 Semester 8		
Required Credits: 15		
AES 3003	Professional Arabic	3
CDA 4803	VFX, Audio, Editing, Compositing	3
CDA 4703	3D Animation	3
CDA 4806	Final Project - Animation	6

Corporate and Media Communication Major

Year 3 Semester 5		
Required Credits: 15		
AES 1003	Emirati Studies	3
BUS 3003	Managing People and Organisations	3
CMC 3503	Social Media	3
COM 2413	Portfolio and Presentation Skills	3
LSC 2103	Academic Reading and Writing II	3

Year 3 Semester 6		
Required Credits: 15		
CMC 3603	Media Relations	3
CMC 3613	Corporate Communication II	3
CMC 3623	Media and Society	3
LSN 1113	Introduction to Sustainability	3
LSS 1003	Life and Study Skills	3

Year 4 Semester 7		
Required Credits: 15		
CMC 3633	Digital Broadcasting	3
CMC 4623	Communication Theory	3
COM 4806	Learning in the Workplace	6
LSS 2533	Research Methods	3

Year 4 Semester 8		
Required Credits: 15		
AES 3003	Professional Arabic	3
CDA 4803	CMC 4703 Public Relations	3
CMC 4713	Media Law and Ethics	3
CMC 4806	Final Project – Corporate and Media Communication	6

Fashion Design and Merchandising Major

Year 3 Semester 5		
Required Credits: 15		
AES 1003	Emirati Studies	3
CDF 3503	Fashion Design and Textile	3
CDF 3523	Fashion Design and Technology I	3
COM 2413	Portfolio and Presentation Skills	3
LSC 2103	Academic Reading and Writing II	3

Year 3 Semester 6		
Required Credits: 15		
CDF 3603	Fashion Design and Trend Research	3
CDF 3623	Fashion Design and Technology II	3
CDF 3513	Fashion Draping and Pattern Making	3
LSN 1113	Introduction to Sustainability	3
LSS 1003	Life and Study Skills	3

Year 4 Semester 7		
Required Credits: 15		
CDF 4713	Fashion and CAD Design	3
CDF 4703	Fashion Design and Production	3
COM 4806	Learning in the Workplace	6
LSS 2533	Research Methods	3

Year 4 Semester 8		
Required Credits: 15		
AES 3003	Professional Arabic	3
CDF 4723	Fashion Marketing	3
CDF 4803	Fashion Merchandising	3
CDF 4806	Final Project - Fashion Design	6

Graphic Design Major

Year 3 Semester 5		
Required Credits: 15		
AES 1003	Emirati Studies	3
CDG 3503	Typography I	3
CDG 3513	Intro to Design Illustrations	3
COM 2413	Portfolio and Presentation Skills	3
LSC 2103	Academic Reading and Writing II	3

Year 3 Semester 6		
Required Credits: 15		
CDG 3603	Typography II	3
CDG 3623	History of Graphic Design	3
CDG 3613	Studio I	3
LSN 1113	Introduction to Sustainability	3
LSS 1003	Life and Study Skills	3

Year 4 Semester 7		
Required Credits: 15		
CDG 4723	Sustainable Social Design	3
CDG 4703	Studio II	3
COM 4806	Learning in the Workplace	6
LSS 2533	Research Methods	3

Year 4 Semester 8		
Required Credits: 15		
AES 3003	Professional Arabic	3
CDG 4713	Packaging Design	3
CDG 4803	Photography for Graphic Design	3
CDG 4806	Final Project – Graphic Design	6

Video Production Major

Year 3 Semester 5		
Required Credits: 15		
AES 1003	Emirati Studies	3
CMV3503	Editing	3
CMV 3513	Production Skills I	3
COM 2413	Portfolio and Presentation Skills	3
LSC 2103	Academic Reading and Writing II	3

Year 3 Semester 6		
Required Credits: 15		
CMV 4103	Production Skills II	3
CMV 4606	Short Video	6
LSN 1113	Introduction to Sustainability	3
LSS 1003	Life and Study Skills	3

Year 4 Semester 7		
Required Credits: 18		
CMV 4709	Documentary and Video Production	9
COM 4806	Learning in the Workplace	6
LSS 2533	Research Methods	3

Year 4 Semester 8		
Required Credits: 12		
AES 3003	Professional Arabic	3
CMV 4803	Advanced Edit and Effects	3
CDG 4806	Final Project – Video Production	6

Business

The Business Division has a mission of being committed to developing and delivering quality, student-centred Business education that provides students with the knowledge and skills to meet the evolving needs of stakeholders in the UAE. The Division serves the needs of the region by offering sustainable programmes that provide both local and global perspectives, promote social responsibility and enhance critical thinking and professional practices. This mission is informed by and supports the continuing accreditation of the programme by Accreditation Council for Business Schools and Programs (ACBSP).

The Division provides superior graduates capable of assuming challenging and key positions, integrating the business expertise and skills needed in a rapidly evolving society. These programmes enable graduates to meet professional requirements found in a bilingual multicultural business environment and develop employability and lifelong learning skills leading to a variety of management careers in local and international organisations within the UAE.

Business graduates find their skills are highly sought after by many UAE organisations. Graduates can expect to work in a wide range of industries and organisations with the public and private sector including banks, accountancy firms, property companies, the aviation industry, oil and gas companies, the government, information technology firms, etc. or opt to become entrepreneurs.

Bachelor of Applied Science in Business Administration

The Business Administration programme allows students to pursue a either a general Business Administration degree, or a Business Administration degree with a selected Major and/or Minors. A Major/Minor provides additional knowledge and skills needed to function in a specialised business environment as well as being able to perform general business related functions.

* CLICK HERE or go to page 122 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Common Courses

		Course Credits
Business Administration Core Courses		
Major Code: BAD		
Required Credits: 48		
BUS 1003	Management and Leadership	3
BUS 1103	Economics for Managers	3
BUS 1203	Software Applications for Business	3
BUS 1303	Marketing	3
BUS 1403	Business Ethics and Corporate Governance	3
BUS 1503	Accounting for Managers	3
BUS 2003	Business and Commercial Law	3
BUS 2103	Operations Management	3
BUS 2203	Business Statistics for Managers	3
BUS 2303	Financial Management	3
BUS 2403	Innovation and Entrepreneurship	3
BUS 3003	Managing People and Organisations	3
BUS 3103	International Business and Globalisation	3
BUS 3203	Strategic Management & Business Policy Simulations	3
BUS 3406	Work Related Learning	6

	Course Credits
General Studies	
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	6

		Course Credits
Business Administration General Elective Courses		
See Programme Chair for available courses		
Required Credits: 3 (Non major students only)		
BUS 2903	Introduction to Logistics and Supply Chain Management	3
BUS 2913	Sustaining Cultural Identity through Tourism and Events	3
BUS 2923	Introduction to Sustainable Property Development and Management	3
BUS 2933	Macroeconomics	3
BUS 3903	Contemporary Issues in Business	3
BUS 3913	Emotional Intelligence for Business Effectiveness	3
BUS 3923	Management Information Systems Incorporating SAP	3

Business Administration Specialisation Elective Courses

See Programme Chair for available courses

Note: A minor may be achieved with 12 credits in any one area, a major requires 30 credits. Mixing various disciplines results in a general Business Administration degree.

Required Credits: 30-39

See next page for more details.

Major or Minor in Business

Business students are given the opportunity to choose both a major specialisation and an optional minor. Students are able to develop a more diverse range of skills to be better able to meet the dynamic needs of various employers. Students must complete 30 credits in any one Business specialisation area to complete a major. These 30 credits must include the specialisation related Integrated Industry Project. In order to achieve a minor students must complete 12 credits in any one Business specialisation area. These 12 credits may not include an Integrated Industry Project. Students not meeting the minor or major requirements graduate with a general Business Administration degree.

		Course Credits
Accounting		
Major Code: BAC		
Required Credits: 30		
BUS 4113	Financial Accounting I	3
BUS 4123	Auditing	3
BUS 4133	Managerial Accounting I	3
BUS 4143	IFRS	3
BUS 4153	Financial Accounting II	3
BUS 4163	Taxation	3
BUS 4173	Managerial Accounting II	3
BUS 4183	Corporate Finance	3
BUS 4916	Integrative Industry Project (Accounting)	6

		Course Credits
International Business Management		
Major Code: BIM		
Required Credits: 30		
BUS 4353	International Human Resource Management	3
BUS 4533	International Quality Management System	3
BUS 4623	International Business Finance	3
BUS 4643	Cross-Cultural Relations Management	3
BUS 4653	International Marketing for Global Competitiveness	3
BUS 4663	International Trade	3
BUS 4673	International Law	3
BUS 4683	Middle East Development and Logistics	3
BUS 4966	Integrative Industry Project (International Business Management)	6

		Course Credits
Finance and Banking		
Major Code: BFS		
Required Credits: 30		
BUS 4213	Financial Quantitative Methods	3
BUS 4223	Retail Finance and Banking	3
BUS 4233	Financial Assets and Markets	3
BUS 4243	International Trade and Finance	3
BUS 4253	Law, Ethics and Professional Standards	3
BUS 4263	Corporate Finance and Banking	3
BUS 4273	Wealth and Risk Management	3
BUS 4283	Islamic Finance and Banking	3
BUS 4926	Integrative Industry Project (Finance and Banking)	6

		Course Credits
Quality and Strategic Management		
Major Code: BQS		
Required Credits: 30		
BUS 4373	Strategic Human Resource Management	3
BUS 4513	Strategic Decisions with Management Science	3
BUS 4533	International Quality Management System	3
BUS 4543	Quality Management Tools	3
BUS 4553	Strategic Supply Chain Management	3
BUS 4563	Strategic Marketing Management	3
BUS 4573	Advanced Strategic Management	3
BUS 4583	ISO Standards and Excellence	3
BUS 4956	Integrative Industry Project (Quality and Strategic Management)	6

		Course Credits
Human Resource Management		
Major Code: BHR		
Required Credits: 30		
BUS 4313	Employee Relations and UAE Labour Law	3
BUS 4323	Career Development and Planning	3
BUS 4333	Recruitment and Selection	3
BUS 4343	Training and Development	3
BUS 4353	International Human Resource Management	3
BUS 4363	Managing Organisational Change	3
BUS 4373	Strategic Human Resource Management	3
BUS 4383	Performance Management	3
BUS 4936	Integrative Industry Project (Human Resource Management)	6

		Course Credits
Supply Chain Management		
Major Code: BSM		
Required Credits: 30		
BUS 4683	Middle East Development and Logistics	3
BUS 4813	Supply Chain Concepts and Practices	3
BUS 4823	Logistics and Transportation 1	3
BUS 4833	Manufacturing in Supply Chain	3
BUS 4843	Supply Chain Strategy and Management	3
BUS 4853	Logistics and Transportation II	3
BUS 4863	Procurement and Inventory Management	3
BUS 4873	Supply Chain Risk Management	3
BUS 4986	Integrative Industry Project (Supply Chain Management)	6

Total Required Credits	*120*	*Minimum Duration of Study*	4
Maximum Duration of Study	*6*	*Programme Code*	*BADAB*
Industry Sponsored Programme	*No*		

Ideal Semester Plan

Business Administration Common Year

		Course Credits
Year 1 Semester 1		
Required Credits: 15		
BUS 1003	Management and Leadership	3
BUS 1203	Software Applications for Business	3
BUS 1303	Marketing	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3

		Course Credits
Year 1 Semester 2		
Required Credits: 15		
BUS 1103	Economics for Managers	3
BUS 1403	Business Ethics and Corporate Governance	3
BUS 1503	Accounting for Managers	3
AES 1003	Emirati Studies	3
LSM 1003	Applied Mathematics	3

Year 2 Semester 3		
Required Credits: 15		
BUS 2003	Business and Commercial Law	3
BUS 2203	Business Statistics for Managers	3
BUS 2303	Financial Management	3
AES 1013	Arabic Communications I	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 15		
BUS 2103	Operations Management	3
BUS 2403	Innovation and Entrepreneurship	3
LSC 2183	English for Specific Purposes	3
LSN 1113	Introduction to Sustainability	3
LSS 2533	Research Methods	3

Business Administration no Major

Year 3 Semester 5		
Required Credits: 15		
BUS 3003	Managing People and Organisations	3
BUS 3103	International Business and Globalisation	3
BUS xxxx	Business Administration Elective Course*	3
BUS xxxx	Business Administration Elective Course*	3
AES 3003	Professional Arabic	3

Year 3 Semester 6		
Required Credits: 15		
BUS 3203	Strategic Management & Business Policy Simulations	3
BUS xxxx	Business Administration Elective Course*	3
BUS xxxx	Business Administration Elective Course*	3
BUS 3406	Work Related Learning	6

Year 4 Semester 7		
Required Credits: 15		
BUS xxxx	Business Administration Elective Course*	3
BUS xxxx	Business Administration Elective Course*	3
BUS xxxx	Business Administration Elective Course*	3
BUS xxxx	Business Administration Elective Course*	3
BUS xxxx	Business Administration Elective Course*	3

Year 4 Semester 8		
Required Credits: 15		
BUS xxxx	Business Administration Elective Course*	3
BUS xxxx	Business Administration Elective Course*	3
BUS xxxx	Business Administration Elective Course*	3
BUS xxxx	Integrated Industry Project	6

Accounting Major

		Course Credits
Year 3 Semester 5		
Required Credits: 15		
BUS 3003	Managing People and Organisations	3
BUS 3103	International Business and Globalisation	3
BUS 3203	Strategic Management & Business Policy	3
Business Administration Elective Course		3
Business Administration Elective Course		3

		Course Credits
Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
BUS 3406	Work Related Learning	6
Business Administration Elective Course		3
Business Administration Elective Course		3

Year 4 Semester 7		
Required Credits: 15		
BUS 4113	Financial Accounting I	3
BUS 4123	Auditing	3
BUS 4133	Managerial Accounting I	3
BUS 4143	IFRS	3
BUS 4183	Corporate Finance	3

Year 4 Semester 8		
Required Credits: 15		
BUS 4153	Financial Accounting II	3
BUS 4163	Taxation	3
BUS 4173	Managerial Accounting II	3
BUS 4916	Integrative Industry Project (Accounting)	6

Finance and Banking Major

Year 3 Semester 5		
Required Credits: 15		
BUS 3003	Managing People and Organisations	3
BUS 3103	International Business and Globalisation	3
BUS 3203	Strategic Management & Business Policy Simulations	3
Business Administration Elective Course		3
Business Administration Elective Course		3

Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
BUS 3406	Work Related Learning	6
Business Administration Elective Course		3
Business Administration Elective Course		3

Year 4 Semester 7		
Required Credits: 15		
BUS 4213	Financial Quantitative Methods	3
BUS 4223	Retail Finance and Banking	3
BUS 4233	Financial Assets and Markets	3
BUS 4243	International Trade and Finance	3
BUS 4253	Law, Ethics and Professional Standards	3

Year 4 Semester 8		
Required Credits: 15		
BUS 4263	Corporate Finance and Banking	3
BUS 4273	Wealth and Risk Management	3
BUS 4283	Islamic Finance and Banking	3
BUS 4926	Integrative Industry Project (Finance and Banking)	6

Human Resource Management Major

		Course Credits
Year 3 Semester 5		
Required Credits: 15		
BUS 3003	Managing People and Organisations	3
BUS 3103	International Business and Globalisation	3
BUS 3203	Strategic Management & Business Policy Simulations	3
Business Administration Elective Course		3
Business Administration Elective Course		3

		Course Credits
Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
BUS 3406	Work Related Learning	6
Business Administration Elective Course		3
Business Administration Elective Course		3

Year 4 Semester 7		
Required Credits: 15		
BUS 4313	Employee Relations and UAE Labour Law	3
BUS 4323	Career Development and Planning	3
BUS 4333	Recruitment and Selection	3
BUS 4343	Training and Development	3
BUS 4363	Managing Organisational Change	3

Year 4 Semester 8		
Required Credits: 15		
BUS 4353	International Human Resource Management	3
BUS 4373	Strategic Human Resource Management	3
BUS 4383	Performance Management	3
BUS 4936	Integrative Industry Project (Human Resource Management)	6

International Business Management Major

Year 3 Semester 5		
Required Credits: 15		
BUS 3003	Managing People and Organisations	3
BUS 3103	International Business and Globalisation	3
BUS 3203	Strategic Management & Business Policy Simulations	3
Business Administration Elective Course		3
Business Administration Elective Course		3

Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
BUS 3406	Work Related Learning	6
Business Administration Elective Course		3
Business Administration Elective Course		3

Year 4 Semester 7		
Required Credits: 15		
BUS 4353	International Human Resource Management	3
BUS 4533	International Quality Management System	3
BUS 4623	International Business Finance	3
BUS 4643	Cross Cultural Relations Management	3
BUS 4673	International Law	3

Year 4 Semester 8		
Required Credits: 15		
BUS 4653	International Marketing for Global Competitiveness	3
BUS 4663	International Trade	3
BUS 4683	Middle East Development and Logistics	3
BUS 4966	Integrative Industry Project (International Business Management)	6

Quality and Strategic Management Major

		Course Credits
Year 3 Semester 5		
Required Credits: 15		
BUS 3003	Managing People and Organisations	3
BUS 3103	International Business and Globalisation	3
BUS 3203	Strategic Management & Business Policy Simulations	3
Business Administration Elective Course		3
Business Administration Elective Course		3

		Course Credits
Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
BUS 3406	Work Related Learning	6
Business Administration Elective Course		3
Business Administration Elective Course		3

Year 4 Semester 7		
Required Credits: 15		
BUS 4533	International Quality Management System	3
BUS 4553	Strategic Supply Chain Management	3
BUS 4563	Strategic Marketing Management	3
BUS 4573	Advanced Strategic Management	3
BUS 4583	ISO Standards and Excellence	3

Year 4 Semester 8		
Required Credits: 15		
BUS 4373	Strategic Human Resource Management	3
BUS 4513	Strategic Decisions with Management Science	3
BUS 4543	Quality Management Tools	3
BUS 4956	Integrative Industry Project (Quality and Strategic Management)	6

Supply Chain Management Major

Year 3 Semester 5		
Required Credits: 15		
BUS 3003	Managing People and Organisations	3
BUS 3103	International Business and Globalisation	3
BUS 3203	Strategic Management & Business Policy Simulations	3
Business Administration Elective Course		3
Business Administration Elective Course		3

Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
BUS 3406	Work Related Learning	6
Business Administration Elective Course		3
Business Administration Elective Course		3

Year 4 Semester 7		
Required Credits: 15		
BUS 4813	Supply Chain Concepts and Practices	3
BUS 4823	Logistics and Transportation 1	3
BUS 4833	Manufacturing in Supply Chain	3
BUS 4843	Supply Chain Strategy and Management	3
BUS 4683	Middle East Development and Logistics	3

Year 4 Semester 8		
Required Credits: 15		
BUS 4853	Logistics and Transportation II	3
BUS 4863	Procurement and Inventory Management	3
BUS 4873	Supply Chain Risk Management	3
BUS 4986	Integrative Industry Project (Supply Chain Management)	6

*: Business Administration Elective Courses are chosen either from the list of General Business Elective courses, or from the list of Specialisation Business Major required or elective courses

Computer Information Science

The mission of the Computer Information Science Division is to provide future-focused, student-centred programmes that prepare students for the dynamic Information Systems and Information Technology sectors of the UAE. CIS programme graduates are "T-shaped professionals" with industry-ready technical and professional skills. CIS programmes provide local and global perspectives, develop analytical skills, encourage lifelong learning and promote effective and ethical management and leadership practices. As a result, HCT CIS graduates are in high demand from leading industry employers looking for talented people who have the technical, communication and team-working skills needed to enhance their organisations.

All CIS programmes are continuously monitored and reviewed to ensure that the skills students acquire and the resources they use are at the cutting edge of technology and are industry-appropriate. Programmes are designed to maintain the current CIPS accreditation, and additionally to attain accreditation with ABET. CIS graduates have excellent career prospects across all sectors (private, public, governmental) within the continually growing industries of computing, networking, security and forensics, information management, multimedia technology, interactive learning, software development and applications development.

Bachelor of Applied Science in Information Systems

The Bachelor of Applied Science in Information Systems (BASIS) programme prepares students to apply ethical values to complex and unpredictable problems and to plan, design, implement, evaluate, and manage an organisation's ICT infrastructure. The programme provides students with the required knowledge, skills, and competencies in the areas of information technology assets, archival, and information processing systems. Throughout the programme, students learn to apply fundamental concepts and skills from a variety of information technologies and develop an understanding of the role of information systems within organisations. Students also develop professional work competencies to complement their technical skills and apply high level special administrative responsibilities including leading multiple and complex groups. Within each concentration, students learn to apply current and advanced techniques, skills, and tools; analyse organisations and user needs; create and evaluate computer-based solutions; and implement archiving solutions in a given organisational environment.

* CLICK HERE or go to page 123 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Business Solutions Major

The Business Solutions major is designed to produce graduates who can successfully align information technology and business processes to address organisational needs. Students will study how the effective and efficient use of information systems supports enterprise-wide solutions and helps drive innovation. This major provides a sound background in advanced problem-solving, information analysis, and project management to equip students with the skills to create, implement, and manage IT solutions in response to business challenges and requirements. Graduates of this major are prepared for direct entry into positions related to the management of information systems within organisations.

Information Systems Core Courses		Course Credits
Required Credits: 51		
CIS 1003	Information Systems in Organisations and Society	3
CIS 1103	Hardware and Networking	3
CIS 1203	Web Technologies	3
CIS 1303	Data and Information Management	3
CIS 1403	Fundamentals of Programming	3
CIS 2003	Statistics and Probability	3
CIS 2103	Principles of Information Assurance, Security and Privacy	3
CIS 2203	Applied Discrete Maths	3
CIS 2303	Systems Analysis and Design	3
CIS 2403	Object Oriented Programming	3
CIS 2903	Operating Systems	3
CIS 3103	Project Management	3
CIS 3203	Enterprise Architecture	3
CIS 4203	Information Technology Strategy and Governance	3
CIS 4803	Work Related Learning (5 weeks)	3
CIS 4906	Capstone Project (Integrative & Consultancy Focused)	6

Business Solutions Core Courses		Course Credits
Major code: CIB		
Required Credits: 30		
CIB 2003	Technology Based Marketing	3
CIB 3003	Human Resource Management and Systems	3
CIB 3103	Object Oriented Analysis & Design	3
CIB 3203	Accounting For Managers	3
CIB 3303	E-Business Principles	3
CIB 3403	Advanced Database Technologies	3
CIB 4003	E-Business Applications Development	3
CIB 4103	Business Finance	3
CIB 4203	Customer Relationship Management Systems	3
CIB 4603	Enterprise Resource Planning	3

Computer and Information Science Elective Courses	Course Credits
See Programme Chair for available courses	
Required Credits: 12	
Any 2000 level course not from the major core of the target concentration	3
Any 3000/4000 level course not from the major core of the target concentration	9

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	6

Total Required Credits	*123*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*CIBAB*
Industry Sponsored Programme	*No*		

Ideal Semester Plan

Business Solutions Major

		Course Credits
Year 1 Semester 1		
Required Credits: 15		
CIS 1003	Information Systems in Organisations and Society	3
CIS 1103	Hardware and Networking	3
CIS 1203	Web Technologies	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3

		Course Credits
Year 1 Semester 2		
Required Credits: 15		
AES 1013	Arabic Communications I	3
CIS 1303	Data and Information Management	3
CIS 1403	Fundamentals of Programming	3
LSN 2433	Ecology	3
LSM 1003	Applied Mathematics	3

Year 2 Semester 3		
Required Credits: 15		
CIS 2103	Principles of Information Assurance, Security and Privacy	3
CIS 2203	Applied Discrete Maths	3
CIS 2403	Object Oriented Programming	3
CIS 2903	Operating Systems	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 15		
AES 1003	Emirati Studies	3
CIB 2003	Technology Based Marketing	3
CIS 2003	Statistics and Probability	3
CIS 2303	Systems Analysis and Design	3
CIS 2000 level non major elective course		3

Year 3 Semester 5		
Required Credits: 18		
CIB 3003	Human Resource Management and Systems	3
CIB 3103	Object Oriented Analysis & Design	3
CIB 3203	Accounting For Managers	3
CIS 3203	Enterprise Architecture	3
LSC 1503	Academic Spoken Communication	3
LSS 2533	Research Methods	3

Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
CIB 3303	E-Business Principles	3
CIB 3403	Advanced Database Technologies	3
CIB 4603	Enterprise Resource Planning	3
CIS 3103	Project Management	3

Year 4 Semester 7		
Required Credits: 15		
CIB 4003	E-Business Applications Development	3
CIB 4103	Business Finance	3
CIB 4203	Customer Relationship Management Systems	3
CIS upper level non major elective course		3
CIS upper level non major elective course		3

Year 4 Semester 8		
Required Credits: 15		
CIS 4203	Information Technology Strategy and Governance	3
CIS 4803	Work Related Learning (5 weeks)	3
CIS 4906	Capstone Project (Integrative & Consultancy Focused)	6
CIS upper level non major elective course		3

Bachelor of Applied Science in Information Technology

The Bachelor of Applied Science in Information Technology (BASIT) programme prepares students to meet the needs of the workforce for knowledgeable and skilled IT professionals who are able to apply ethical values to complex and unpredictable problems and to plan, design, implement, evaluate, and manage IT solutions. The programme provides students with the broad technical education necessary for productive employment in the public or private sector, and it allows them to develop an understanding of fundamentals and current issues important for future development. Students also develop professional work competencies to complement their technical skills and apply high-level special administrative responsibilities. The programme is structured as a set of core, elective, general education, and major courses. In the core courses, students will acquire the core knowledge, skills, and competencies needed for IT. Through the major courses, students will develop up-to-date knowledge and skills, in this fast-growing field, that meet the industry requirement.

* CLICK HERE or go to page 123 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Application Development Major

This major is designed to produce UAE graduates with the development skills required to create cutting-edge software applications and apps on multiple platforms. The major offers the required knowledge and skills in current software development methodologies using state-of-the-art tools and facilities. It integrates enterprise systems development, database technologies, and mobile platforms. Graduates of this major will be able to work as software engineers, enterprise system developers, system architects, project managers, and mobile application developers.

Instructional Technology and Training Management Major

This major is designed to produce graduates with the knowledge and skills to analyse, design, develop, implement, and evaluate technology-driven learning environments for corporate and learning-institution contexts. It prepares students to employ cutting-edge technologies to enhance the learning process and accommodate individual learning preferences. The major will prepare students to work effectively in the corporate sector, build training programmes, create corporate staff development strategies, plan, and acquire resources. This major provides students with the essential knowledge and skills to become effective trainers of technology and use technology to train. Graduates will be able to work as consultants, educational technology specialists, training managers, staff development managers, and corporate trainers.

Interactive Multimedia Technologies Major

This major is designed to produce graduates with professional skills built on a sound foundation in the fields of interactivity and multimedia powered by information technology. The interactive multimedia major educates students, through a hands-on approach, to become leaders and innovators in a new and interactive society based on interactive arts, multimedia, web and interface design, game design, and development. It stresses creative content development and communication through interaction with the goal of seeking innovative ways to connect individuals to ideas and information. The major prepares students to work as 2D and 3D graphic artists, animation experts, interactive multimedia developers, game designers and developers, and simulation specialists.

Networking Major

This major is designed to produce graduates who can design, configure, implement, and troubleshoot converged campus and enterprise networks. The major provides knowledge and skills to work at all levels of local and enterprise networks: edge technologies such as switched, wireless, and mobile networks; LAN, WAN, and core routing technologies; network security; and server administration. Graduates of this major will be able to work as network engineers, network architects, infrastructure designers, project managers, and consultants.

Security and Forensics Major

This major is designed to produce graduates with skills and a strong foundation in the field of information security. It provides technical and managerial skills for assessing risk, securing information assets, identifying and responding to attacks, conducting a forensic investigation, and recovering from incidents and disasters. The major prepares students to work as requirement security specialists; security practitioners, managers, and consultants; forensic investigators; and IT auditors. Graduates will be able to work at all levels of information security, including policy, security system design, implementation, and forensic investigation.

Common Courses

		Course Credits
Information Technology Core Courses		
Required Credits: 51		
CIS 1003	Information Systems in Organisations and Society	3
CIS 1103	Hardware and Networking	3
CIS 1203	Web Technologies	3
CIS 1303	Data and Information Management	3
CIS 1403	Fundamentals of Programming	3
CIS 2003	Statistics and Probability	3
CIS 2103	Principles of Information Assurance, Security and Privacy	3
CIS 2203	Applied Discrete Maths	3
CIS 2303	Systems Analysis and Design	3
CIS 2403	Object Oriented Programming	3
CIS 2903	Operating Systems	3
CIS 3003	Human Computer Interaction	3
CIS 3103	Project Management	3
CIS 3303	System Architecture and Integration	3
CIS 4203	Information Technology Strategy and Governance	3
CIS 4803	Work Related Learning (5 weeks)	3
CIS 4906	Capstone Project (Integrative & Consultancy Focused)	6

	Course Credits
General Studies	
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	6

	Course Credits
Computer and Information Science Elective Courses	
See Programme Chair for available courses	
Required Credits: 12	
Any 2000 level course not from the major core of the target concentration	3
Any 3000/4000 level course not from the major core of the target concentration	9

Majors

Applications Development Core Courses		Course Credits
Major code: CIA		
Required Credits: 30		
CIA 2503	Web Applications Development	3
CIA 3103	Database Design and Administration	3
CIA 3203	Game Development	3
CIA 3303	Principles of Mobile Applications	3
CIA 3403	Cloud App Development	3
CIA 4003	Advanced Mobile Applications	3
CIA 4103	Data Driven Web Technologies	3
CIA 4203	Enterprise Database Applications	3
CIA 4503	Advanced Object Oriented Programming	3
CIB 3103	Object Oriented Analysis & Design	3

Interactive Multimedia Technologies Core Courses		Course Credits
Major code: CIM		
Required Credits: 30		
CIM 2003	Graphic Design for Multimedia	3
CIM 2103	Storyboarding for Multimedia	3
CIM 3003	2D Animation	3
CIM 3203	Programming for Multimedia	3
CIM 3403	3D Modelling and Animation	3
CIM 3503	Computer Game Design and Development	3
CIM 4003	Multimedia Scripting	3
CIM 4103	Web Authoring and Administration	3
CIM 4203	Virtual Reality and Simulation	3
CIM 4303	VFX, Audio, Editing and Composition	3

Security and Forensics Core Courses		Course Credits
Major code: CSF		
Required Credits: 30		
CIN 2003	Enterprise Network Services	3
CSF 3003	Cyber Law and Ethics	3
CSF 3103	Incidence Response and Disaster Recovery	3
CSF 3203	Intrusion Detection and Ethical Hacking	3
CSF 3403	Computer Forensics and Investigation	3
CSF 3603	Cryptography and Network Security	3
CSF 4003	Security and Risk Management	3
CSF 4103	Web Application and E-Commerce Security	3
CSF 4203	Telecommunications and WAN Security	3
CSF 4613	Security Intelligence	3

Total Required Credits	*123*
Maximum Duration of Study	*6*
Industry Sponsored Programme	*No*
Minimum Duration of Study	*4*

Instructional Technology and Training Management Major		Course Credits
Major code: CTT		
Required Credits: 30		
CIB 4203	Customer Relationship Management Systems	3
CIM 2003	Graphic Design for Multimedia	3
CTT 2003	Principles of Learning for Instructional Technology	3
CTT 3103	Learning Environment Design, Support and Administration	3
CTT 3303	Assistive Technology	3
CTT 3403	Instructional Design for Computer Based Training	3
CTT 3503	Human Performance Technology	3
CTT 4003	Distance and Online Education	3
CTT 4203	Staff Development and Corporate Training Strategies	3
CTT 4303	Technology Based Assessment Design and Administration	3

Networking Core Courses		Course Credits
Major code: CIN		
Required Credits: 36		
CIN 2003	Enterprise Network Services	3
CIN 2103	Networking Fundamentals	3
CIN 2203	Routing Protocols	3
CIN 3003	LAN Switching	3
CIN 3103	Wireless Networks	3
CIN 3203	WAN Technologies	3
CIN 3303	Network Security	3
CIN 3503	Virtualisation Technologies	3
CIN 3603	Scalable Networks	3
CIN 4003	Routing Solutions for the Enterprise	3
CIN 4103	Network Management	3
CIN 4203	Voice over Internet Protocol (VoIP) Fundamentals	

Programme Codes	
Applications Development	*CIAAB*
Instructional Technology and Training Management	*CTTAB*
Interactive Multimedia Technologies	*CIMAB*
Networking	*CINAB*
Security and Forensics	*CSFAB*

Ideal Semester Plan

Common Courses

The first two semesters of the Bachelor of Applied Science in Information Technology are common. Majors are listed separately below.

		Course Credits
Year 1 Semester 1		
Required Credits: 15		
CIS 1003	Information Systems in Organisations and Society	3
CIS 1103	Hardware and Networking	3
CIS 1203	Web Technologies	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3

		Course Credits
Year 1 Semester 2		
Required Credits: 15		
AES 1013	Arabic Communications I	3
CIS 1303	Data and Information Management	3
CIS 1403	Fundamentals of Programming	3
LSN 2433	Ecology	3
LSM 1003	Applied Mathematics	3

Majors

Applications Development Major

Year 2 Semester 3		
Required Credits: 15		
CIS 2103	Principles of Information Assurance, Security and Privacy	3
CIS 2203	Applied Discrete Maths	3
CIS 2403	Object Oriented Programming	3
CIS 2903	Operating Systems	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 15		
AES 1003	Emirati Studies	3
CIS 2003	Statistics and Probability	3
CIA 2503	Web Applications Development	3
CIS 2303	Systems Analysis and Design	3
CIS 2000 level non major elective course		3

Year 3 Semester 5		
Required Credits: 18		
CIA 3103	Database Design and Administration	3
CIA 3203	Game Development	3
CIS 3003	Human Computer Interaction	3
CIS 3303	System Architecture and Integration	3
LSC 1503	Academic Spoken Communication	3
LSS 2533	Research Methods	3

Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
CIA 3303	Principles of Mobile Applications	3
CIA 3403	Cloud App Development	3
CIB 3103	Object Oriented Analysis & Design	3
CIS 3103	Project Management	3

Year 4 Semester 7		
Required Credits: 15		
CIA 4003	Advanced Mobile Applications	3
CIA 4103	Data Driven Web Technologies	3
CIA 4203	Enterprise Database Applications	3
CIA 4503	Advanced Object Oriented Programming	3
CIS upper level non major elective course		3

Year 4 Semester 8		
Required Credits: 15		
CIS 4803	Work Related Learning (5 weeks)	3
CIS 4906	Capstone Project (Integrative & Consultancy Focused)	6
CIS upper level non major elective course		3
CIS upper level non major elective course		3

Instructional Technology and Training Development Major

Year 2 Semester 3		
Required Credits: 15		
CIS 2103	Principles of Information Assurance, Security and Privacy	3
CIS 2203	Applied Discrete Maths	3
CIS 2403	Object Oriented Programming	3
CIS 2903	Operating Systems	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 15		
AES 1003	Emirati Studies	3
CIS 2003	Statistics and Probability	3
CIS 2303	Systems Analysis and Design	3
CTT 2003	Principles of Learning for Instructional Technology	3
CIS 2000 level non major elective course		3

Year 3 Semester 5		
Required Credits: 18		
CIM 2003	Graphic Design for Multimedia	3
CIS 3003	Human Computer Interaction	3
CTT 3303	Assistive Technology	3
CIS 3303	System Architecture and Integration	3
LSC 1503	Academic Spoken Communication	3
LSS 2533	Research Methods	3

Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
CIS 3103	Project Management	3
CTT 3103	Learning Environment Design, Support and Administration	3
CTT 3403	Instructional Design for Computer-Based Training	3
CTT 3503	Human Performance Technology	3

Year 4 Semester 7		
Required Credits: 15		
CIB 4203	Customer Relationship Management Systems	3
CTT 4003	Distance and Online Education	3
CTT 4203	Staff Development and Corporate Training Strategies	3
CTT 4303	Technology Based Assessment Design and Administration	3
CIS upper level non major elective course		3

Year 4 Semester 8		
Required Credits: 15		
CIS 4803	Work Related Learning (5 weeks)	3
CIS 4906	Capstone Project (Integrative & Consultancy Focused)	6
CIS upper level non major elective course		3
CIS upper level non major elective course		3

Interactive Multimedia Technologies Major

Year 2 Semester 3		
Required Credits: 15		
CIS 2103	Principles of Information Assurance, Security and Privacy	3
CIS 2203	Applied Discrete Maths	3
CIS 2403	Object Oriented Programming	3
CIS 2903	Operating Systems	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 15		
AES 1003	Emirati Studies	3
CIS 2003	Statistics and Probability	3
CIS 2303	Systems Analysis and Design	3
CTT 2003	Principles of Learning for Instructional Technology	3
CIS 2000 level non major elective course		3

Year 3 Semester 5		
Required Credits: 18		
CIM 2103	Storyboarding for Multimedia	3
CIM 3003	2D Animation	3
CIS 3003	Human Computer Interaction	3
CIS 3303	System Architecture and Integration	3
LSC 1503	Academic Spoken Communication	3
LSS 2533	Research Methods	3

Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
CIM 3203	Programming for Multimedia	3
CIM 3403	3D Modelling and Animation	3
CIM 3503	Computer Game Design and Development	3
CIS 3103	Project Management	3

Year 4 Semester 7		
Required Credits: 15		
CIM 4003	Multimedia Scripting	3
CIM 4103	Web Authoring and Administration	3
CIM 4203	Virtual Reality and Simulation	3
CIM 4303	VFX, Audio, Editing and Composition	3
CIS upper level non major elective course		3

Year 4 Semester 8		
Required Credits: 15		
CIS 4803	Work Related Learning (5 weeks)	3
CIS 4906	Capstone Project (Integrative & Consultancy Focused)	6
CIS upper level non major elective course		3
CIS upper level non major elective course		3

Networking Major

Year 2 Semester 3		
Required Credits: 18		
CIN 2103	Networking Fundamentals	3
CIS 2103	Principles of Information Assurance, Security and Privacy	3
CIS 2203	Applied Discrete Maths	3
CIS 2403	Object Oriented Programming	3
CIS 2903	Operating Systems	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 18		
AES 1003	Emirati Studies	3
CIS 2003	Statistics and Probability	3
CIN 2203	Routing Protocols	3
CIN 3003	LAN Switching	3
CIS 2303	Systems Analysis and Design	3
CIS 2000 level non major elective course		3

Year 3 Semester 5		
Required Credits: 18		
CIN 2003	Enterprise Network Services	3
CIN 3103	Wireless Networks	3
CIN 3603	Scalable Networks	3
CIS 3003	Human Computer Interaction	3
LSC 1503	Academic Spoken Communication	3
LSS 2533	Research Methods	3

Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
CIN 3203	WAN Technologies	3
CIN 3303	Network Security	3
CIN 3503	Virtualisation Technologies	3
CIS 3103	Project Management	3

Year 4 Semester 7		
Required Credits: 15		
CIN 4003	Routing Solutions for the Enterprise	3
CIN 4103	Network Management	3
CIS 3303	System Architecture and Integration	3
CIS upper level non major elective course		3
CIS upper level non major elective course		3

Year 4 Semester 8		
Required Credits: 15		
CIN 4203	Voice over Internet Protocol (VoIP) Fundamentals	3
CIS 4803	Work Related Learning (5 weeks)	3
CIS 4906	Capstone Project (Integrative & Consultancy Focused)	6
CIS upper level non major elective course		3

Security and Forensics Major

Year 2 Semester 3		
Required Credits: 15		
CIS 2103	Principles of Information Assurance, Security and Privacy	3
CIS 2203	Applied Discrete Maths	3
CIS 2403	Object Oriented Programming	3
CIS 2903	Operating Systems	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 15		
AES 1003	Emirati Studies	3
CIS 2003	Statistics and Probability	3
CIN 2003	Enterprise Network Services	3
CIS 2303	Systems Analysis and Design	3
CIS 2000 level non major elective course		3

Year 3 Semester 5		
Required Credits: 18		
CSF 3003	Cyber Law and Ethics	3
CSF 3103	Incidence Response and Disaster Recovery	3
CIS 3003	Human Computer Interaction	3
CIS 3303	System Architecture and Integration	3
LSC 1503	Academic Spoken Communication	3
LSS 2533	Research Methods	3

Year 3 Semester 6		
Required Credits: 15		
AES 3003	Professional Arabic	3
CIS 3103	Project Management	3
CSF 3203	Intrusion Detection and Ethical Hacking	3
CSF 3403	Computer Forensics and Investigation	3
CSF 3603	Cryptography and Network Security	3

Year 4 Semester 7		
Required Credits: 15		
CSF 4003	Security and Risk Management	3
CSF 4103	Web Application and E-Commerce Security	3
CSF 4203	Telecommunications and WAN Security	3
CSF 4613	Security Intelligence	3
CIS upper level non major elective course		3

Year 4 Semester 8		
Required Credits: 15		
CIS 4803	Work Related Learning (5 weeks)	3
CIS 4906	Capstone Project (Integrative & Consultancy Focused)	6
CIS upper level non major elective course		3
CIS upper level non major elective course		3

Diploma in Applied Computer and Information Science

The Applied Diploma in Computer and Information Science programme prepares students for careers in the design, installation, operation, and administration of network and Internet-based information systems. Graduates will identify, analyse and solve problems, both within and across areas of Information Technology. Using the most up-to-date curriculum, the programme develops students' technical skills as well as communications and teamwork skills to meet industry needs in employing highly effective workers.

* CLICK HERE or go to page 124 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Common Courses

		Course Credits
Computer Information Science Core Courses		
Required Credits: 35		
CID 1003	Introduction to Internet Technologies	3
CID 1013	Computer Hardware and Software	3
CID 1023	Basic Networking	3
CID 1053	Web Design	3
CID 1063	Databases	3
CID 2003	Database Management Systems	3
CID 2013	Security Fundamentals	3
CID 2053	Information Assurance	3
CID 2087	Applied Diploma Work Placement	7
CID 2094	Applied Diploma Project	4

		Course Credits
General Studies		
Required Credits: 18		
English, Arabic or other Languages		9
Humanities or Art		3
The Natural Sciences		3
The Social or Behavioural Sciences		3

Major Courses

		Course Credits
Computer System Support & Administration Core Courses		
Major code: CSA		
Required Credits: 15		
CID 1123	Customer Service Skills	3
CID 1203	Networking Concepts	3
CID 2203	Local Area & Wireless Networking	3
CID 2213	Network Services Administration	3
CID 2223	Network Domain Administration	3

		Course Credits
E-Office Support and Administration Core Courses		
Major code: CSE		
Required Credits: 15		
CID 1123	Customer Service Skills	3
CID 1303	Advanced Productivity Tools	3
CID 2303	Fundamentals of Digital Multimedia	3
CID 2313	E-Office Procedures	3
CID 2323	Interactive Multimedia Tools and Applications	3

Total Required Credits	*68*	*Minimum Duration of Study*	*2*
Maximum Duration of Study	*4*	*Programme Code*	*CISAP*
Industry Sponsored Programme	*No*		

Ideal Semester Plan

Computer System Support and Administration

		Course Credits
Year 1 Semester 1		
Required Credits: 15		
AES 1013	Arabic Communications I	3
CID 1003	Introduction to Internet Technologies	3
CID 1013	Computer Hardware and Software	3
CID 1023	Basic Networking	3
LSC 1103	Academic Reading and Writing I	3
Year 2 Semester 3		
Required Credits: 18		
CID 2003	Database Management Systems	3
CID 2013	Security Fundamentals	3
CID 2203	Local Area & Wireless Networking	3
CID 2213	Network Services Administration	3
LSC 2103	Academic Reading and Writing II	3
LSN 2433	Ecology	3

		Course Credits
Year 1 Semester 2		
Required Credits: 15		
CID 1053	Web Design	3
CID 1063	Databases	3
CID 1123	Customer Service Skills	3
CID 1203	Networking Concepts	3
LSS 1003	Life and Study Skills	3
Year 2 Semester 4		
Required Credits: 20		
AES 1003	Emirati Studies	3
CID 2053	Information Assurance	3
CID 2087	Applied Diploma Work Placement	7
CID 2094	Applied Diploma Project	4
CID 2223	Network Domain Administration	3

E-Office Support and Administration

		Course Credits
Year 1 Semester 1		
Required Credits: 15		
AES 1013	Arabic Communications I	3
CID 1003	Introduction to Internet Technologies	3
CID 1013	Computer Hardware and Software	3
CID 1023	Basic Networking	3
LSC 1103	Academic Reading and Writing I	3
Year 2 Semester 3		
Required Credits: 18		
CID 2003	Database Management Systems	3
CID 2013	Security Fundamentals	3
CID 2203	Local Area & Wireless Networking	3
CID 2213	Network Services Administration	3
LSC 2103	Academic Reading and Writing II	3
LSN 2433	Ecology	3

		Course Credits
Year 1 Semester 2		
Required Credits: 15		
CID 1053	Web Design	3
CID 1063	Databases	3
CID 1123	Customer Service Skills	3
CID 1303	Advanced Productivity Tools	3
LSS 1003	Life and Study Skills	3
Year 2 Semester 4		
Required Credits: 20		
AES 1003	Emirati Studies	3
CID 2053	Information Assurance	3
CID 2087	Applied Diploma Work Placement	7
CID 2094	Applied Diploma Project	4
CID 2223	Network Domain Administration	3

Education

The HCT's Teacher Education programmes are developed specifically for the UAE's teaching needs. The HCT B.Ed has been developed in collaboration with one of the world's leading universities - the Melbourne Graduate School of Education at the University of Melbourne, Australia. The Melbourne Graduate School of Education continues to benchmark the HCT B.Ed. to international standards, certifying that the HCT programme is equivalent to an Australian undergraduate bachelor of education degree. Prepared with up-to-date knowledge of educational theory, HCT education students practice the skills they learn at their college in actual classroom situations with intensive practicum placements each semester.

The B.Ed. programme features up to 155 days of practicum, culminating in a 10-week internship in the final semester. This hands-on approach to learning gives students the teaching skills they need to excel in their future careers as educators, and ensures they are "ready to teach" upon graduation. HCT teacher education graduates are working in a wide range of educational settings across the UAE. With a willingness to embrace change, HCT education graduates are making strong contributions to continuous quality improvement in education, and are helping lead in the development of the nation.

Bachelor of Education

The Bachelor of Education (B.Ed.) programme aims to produce teachers with qualifications in a range of specializations for UAE schools. The B.Ed. programme offers students one of the most rewarding careers and an opportunity to shape the future of their country. Prepared with up-to-date knowledge of educational theory, HCT education students develop and practice their teaching skills in UAE government and private school classrooms. This hands-on approach to learning gives students the teaching skills they need to excel in their future careers.

* CLICK HERE or go to page 124 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Common Courses

	Bachelor of Education Core Courses	Course Credits
	Required Credits: 75	
EDU 1003	Introduction to Theories of Learning 1a	3
EDU 1203	Learning to Teach in the Contemporary UAE 1a	3
EDU 1303	Learning Technologies for the Classroom	3
EDU 1503	Introduction to Theories of Learning 1b	3
EDU 1703	Learning to Teach in the Contemporary UAE 1b	3
EDU 2113	English for Classroom Management	3
EDU 2303	Language and Development: SLA Principles and Pedagogy	3
EDU 2803	Teaching Learners with Special Needs	3
EDU 3003	Global Education and Leadership	3
EDU 3033	English for Academic Purposes	3
EDU 4003	Research Methods and Reflective Practice in Education	3
EDU 4103	Managing Innovation and Change in Education	3
EDU 4203	Curriculum Design	3
EDU 4503	Research Project	3
EDU 4603	Employment Preparation for New UAE Educators	3
EPC 1403	Practicum 1a	3
EPC 1903	Practicum 1b	3
EPC 2403	Practicum 2a	3
EPC 2903	Practicum 2b	3
EPC 3403	Practicum 3a	3
EPC 3903	Practicum 3b	3
EPC 4403	Practicum 4a	3
EPC 4909	Practicum 4b (Internship)	9

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	6

Concentrations

Educational Technology Concentration		Course Credits
Code: EDTC		
Required Credits: 24		
EDT 2003	Technologies for Learning I	3
EDT 2203	Information, Communication and Media Studies	3
EDT 2503	Technologies for Learning II	3
EDT 2703	Distance and Online Education	3
EDT 3003	Computer Platforms	3
EDT 3203	Computer-Based Training	3
EDT 3503	Web Design for Learning	3
EDT 3703	Multimedia Authouring for Learning	3

English Language Teaching in Schools Concentration		Course Credits
Code: ELTC		
Required Credits: 24		
ELT 2003	Language Arts A (Speaking, Listening and Vocabulary)	3
ELT 2203	Language Arts B (Teaching Methods for the Primary School Teacher A)	3
ELT 2503	Language Arts C (Reading/Writing/Literature)	3
ELT 2603	Language Arts D (Teaching Methods for the Primary School Teacher)	3
ELT 3003	Child and Adolescent Literature	3
ELT 3203	Language Arts E (Teaching Methods for Secondary School English)	3
ELT 3503	Literacy and Grammar in the Second Language Curriculum	3
ELT 3703	Language Arts F (Teaching Methods for the Secondary School English)	3

Early Childhood Education Concentration		Course Credits
Code: ECEC		
Required Credits: 24		
ECE 2003	Teaching Mathematics in the Early Years: Skills and Concept Acquisition	3
ECE 2203	Learning through the Visual Arts	3
ECE 2503	Theories of Teaching and Learning that Impact the Preschool Curriculum	3
ECE 2603	Learning through the Performing Arts	3
ECE 3003	Literacies in Early Childhood	3
ECE 3203	Learning through Literature	3
ECE 3503	Planning and Assessment in Early Childhood Education	3
ECE 3703	Building Learning Communities in Early Childhood Education	3

Primary Education Concentration		Course Credits
Code: EPRC		
Required Credits: 24		
EPR 2003	Language Arts A (Speaking, Listening and Vocabulary)	3
EPR 2203	Language Arts B (Teaching Methods for the Primary School Teacher A)	3
EPR 2503	Language Arts C (Reading/Writing/Literature)	3
EPR 2603	Language Arts D (Teaching Methods for the Primary School Teacher)	3
EPR 3003	Mathematics for the Primary School Teacher	3
EPR 3203	Mathematics Teaching Methods for the Primary School Teacher	3
EPR 3503	Science for the Primary School Teacher	3
EPR 3703	Science Teaching Methods for the Primary School Teacher	3

Total Required Credits	*129*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*EDUBA*
Industry Sponsored Programme	*No*		

Ideal Semester Plan

Year 1 Semester 1		Course Credits
Required Credits: 18		
EDU 1003	Introduction to Theories of Learning 1a	3
EDU 1203	Learning to Teach in the Contemporary UAE 1a	3
EDU 1303	Learning Technologies for the Classroom	3
EPC 1403	Practicum 1a	3
LSM 1123	Quantitative Reasoning	3
LSS 1003	Life and Study Skills	3

Year 1 Semester 2		Course Credits
Required Credits: 18		
AES 1003	Emirati Studies	3
EDU 1503	Introduction to Theories of Learning 1b	3
EDU 1703	Learning to Teach in the Contemporary UAE 1b	3
EDU 1803	Introduction to Math and Science in the Classroom	3
EPC 1903	Practicum 1b	3
LSS 1123	Basic Methods of Scientific Research and Development	3

Year 2 Semester 3		
Required Credits: 18		
AES 1013	Arabic Communications I	3
EDU 2303	Language and Development: SLA Principles and Pedagogy	3
EPC 2403	Practicum 2a	3
LSC 1503	Academic Spoken Communication	3
Concentration Required Course		3
Concentration Required Course		3

Year 2 Semester 4		
Required Credits: 15		
EDU 2803	Teaching Learners with Special Needs	3
EPC 2903	Practicum 2b	3
LSC 1103	Academic Reading and Writing 1	3
Concentration Required Course		3
Concentration Required Course		3

Year 3 Semester 5		
Required Credits: 15		
AES 3003	Professional Arabic	3
EDU 3033	English for Academic Purposes	3
EPC 3403	Practicum 3a	3
Concentration Required Course		3
Concentration Required Course		3

Year 3 Semester 6		
Required Credits: 15		
EDU 2113	English for Classroom Management	3
EPC 3903	Practicum 3b	3
LSC 2103	Academic Reading and Writing II	3
Concentration Required Course		3
Concentration Required Course		3

Year 4 Semester 7		
Required Credits: 15		
EDU 3003	Global Education and Leadership	3
EDU 4003	Research Methods and Reflective Practice in Education	3
EDU 4103	Managing Innovation and Change in Education	3
EDU 4203	Curriculum Design	3
EPC 4403	Practicum 4a	3

Year 4 Semester 8		
Required Credits: 15		
EDU 4503	Research Project	3
EDU 4603	Employment Preparation for New UAE Educators	3
EPC 4909	Practicum 4b (Internship)	9

Engineering Technology and Science

The Engineering Technology and Science Division has a mission to provide high-quality, hands-on technical education, enabling graduates to continually meet the engineering needs and challenges of the United Arab Emirates and beyond. The reputation and academic integrity of engineering programmes at HCT are high, with a number of Bachelor degrees internationally accredited by the USA-based Engineering Technology Accreditation Commission of ABET (http://www.abet.org). The Division aims to produce graduates effective in the design and practical application of engineering technology solutions, with the ability to lead effectively, work and communicate in an engineering team. Graduates are able to follow standard engineering ethical practices and expand their knowledge and competencies through continuing education and other lifelong learning experiences, as well as serving the community, whether locally, nationally or internationally.

Employment prospects for HCT Engineering Technology graduates are very strong and cover many local and international industrial sectors including aviation, computing, construction, consulting, defence, energy, governance, health care, manufacturing, oil and gas and telecommunications.

HD_BAS in Applied Aviation Maintenance Technology: Airframe and Aeroengines

The programme prepares students for positions as aviation category 'B1.1' (Airframe & Aeroengines) licensed maintenance engineers who are able to work in a team to practically apply Aviation Maintenance Engineering Technology solutions with consideration of the industry ethics, health, safety and environment. Students have the option of exiting with a Higher Diploma credential at the end of year three to meet the licensing requirements or continue towards the BAS degree.

* CLICK HERE or go to page 124 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Aviation Maintenance Technology Core Courses		Course Credits
Required Credits: 39		
AHM 1103	Aviation Mathematics	3
AHM 1309	Electrical Fundamentals (Mod 3 B1 & B2)	9
AHM 1803	Basic Aerodynamics (Mod 8: B1 & B2)	3
AHM 2005	Aviation Legislation (Mod 10B1 & B2)	5
AHM 2903	Human Factors	3
AHM 3004	Work Placement (10 Weeks)	4
EMM 4103	Total Quality Management in Aviation	3
EMM 4203	Aviation Operations Management	3
EMM 4303	Aviation Project Management	3
EMM 4403	Human Resources and Relations Management	3

Airframe and Aeroengine Core Courses		Course Credits
Major code: *AEA*		
Required Credits: 91		
AHA 1403	Electronic Fundamentals (Mod 4 B1)	3
AHA 1504	Digital Techniques/ Electronic Instrument Systems (Mod 5 B1)	4
AHA 1614	Materials and Hardware (Mod 6 B1)	14
AHA 2511	Gas Turbine Engine (Mod 15 B1)	11
AHA 2704	Propeller (Mod 17 B1)	4
AHA 2715	Maintenance Practices (Mod 7 B1)	15
AHA 3140	Turbine Aeroplane Aerodynamics, Structures and Systems (Mod 11A) (B1.1)* 1 yr course	40

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	6

Total Required Credits	*160*	*Minimum Duration of Study*	*3*
Maximum Duration of Study	*5*	*Programme Code*	*AHAAB*
Industry Sponsored Programme	*No*	*Major Code*	*AEA*

Ideal Semester Plan

Airframe and Aeroengines

		Course Credits
Year 1 Semester 1		
Required Credits :21		
AHM 1103	Aviation Mathematics	3
AHM 1203	Aviation Physics	3
AHM 1309	Electrical Fundamentals (Mod 3 B1 & B2)	9
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3

		Course Credits
Year 1 Semester 2		
Required Credits: 21		
AHA 1504	Digital Techniques/ Electronic Instrument Systems (Mod 5 B1)	4
AHA 1614	Materials and Hardware	14
AHM 1803	Basic Aerodynamics (Mod 8: B1 & B2)	3
Summer Semester		
Required Credits: 6		
AHA 1403	Electronic Fundamentals (Mod 4 B1)	3
AES 1013	Arabic Communications I	3

Year 2 Semester 3		
Required Credits: 20		
AHA 2715	Maintenance Practices (Mod 7 B1)	15
AHM 2005	Aviation Legislation (Mod 10B1 & B2)	5

Year 2 Semester 4		
Required Credits: 21		
AHA 2511	Gas Turbine Engine (Mod 15 B1)	11
AHA 2704	Propeller	4
LSC 2103	Academic Reading and Writing II	3
AES 1003	Emirati Studies	3
Summer Semester		
Required Credits: 3		
AHM 2903	Human Factors	3
AHM 3004	Work Placement CC	0

Year 3 Semester 5		
Required Credits: 20		
AHA 3140	Turbine Aeroplane Aerodynamics, Structures and Systems (Mod 11A) (B1.1) *1 yr course (CC)	20

Year 3 Semester 6		
Required Credits: 20		
AHA 3140	Turbine Aeroplane Aerodynamics, Structures and Systems (Mod 11A) (B1.1) *1 yr course	20
Summer Semester		
Required Credits: 4		
AHM 3004	Work Placement	4

Year 4 Semester 7		
Required Credits: 12		
EMM 4203	Aviation Operations Management	3
EMM 4403	Human Resources and Relations Management	3
LSC 1503	Academic Spoken Communication	3
MTH 1113	Statistics for Engineering	3

Year 4 Semester 8		
Required Credits: 12		
EMM 4103	Total Quality Management in Aviation	3
EMM 4303	Aviation Project Management	3
LSC 2183	English for Specific Purposes	3
LSS 1123	Basic Methods of Scientific Research and Development	3

HD_BAS in Applied Aviation Maintenance Technology: Avionics

The programme prepares students for positions as aviation category 'B2' (Avionics) licensed maintenance engineers who are able to work in a team to practically apply aviation maintenance engineering technology solutions with consideration of the industry ethics, health, safety, and environment. Students have the option of exiting with a Higher Diploma credential at the end of year three to meet the licensing requirements or continue towards the BAS degree.

* CLICK HERE or go to page 125 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Aviation Maintenance Technology Core Courses		Course Credits
Required Credits: 39		
AHM 1103	Aviation Mathematics	3
AHM 1309	Electrical Fundamentals (Mod 3 B1 & B2)	9
AHM 1803	Basic Aerodynamics (Mod 8 B1 & B2)	3
AHM 2005	Aviation Legislation (Mod 10 B1 & B2)	5
AHM 2903	Human Factors	3
AHM 3004	Work Placement (10 Weeks)	4
EMM 4103	Total Quality Management in Aviation	3
EMM 4203	Aviation Operations Management	3
EMM 4303	Aviation Project Management	3
EMM 4403	Human Resources and Relations Management	3

Avionics Core Courses		Course Credits
Major code: AVI		
Required Credits: 90		
AHV 1409	Electronic Fundamentals	9
AHV 1509	Digital Techniques Electronic Instrument Systems	9
AHV 2610	Materials and Hardware	10
AHV 2715	Maintenance Practices	15
AHV 3342	Aircraft Aerodynamics, Structures and Systems (Mod 13) (B2) *1 yr course	42
AHV 3405	Propulsion	5

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	6

Total Required Credits	*159*	*Minimum Duration of Study*	*3*
Maximum Duration of Study	*5*	*Programme Code*	*AHAAB*
Industry Sponsored Programme	*No*	*Major Code*	*AVI*

Ideal Semester Plan

Avionics

		Course Credits
Year 1 Semester 1		
Required Credits: 21		
AHM 1103	Aviation Mathematics	3
AHM 1203	Aviation Physics	3
AHM 1309	Electrical Fundamentals (Mod 3 B1 & B2)	9
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3

		Course Credits
Year 1 Semester 2		
Required Credits: 21		
AHM 1803	Basic Aerodynamics (Mod 8 B1 & B2)	3
AHV 1409	Electronic Fundamentals	9
AHV 1509	Digital Techniques Electronic Instrument Systems	9
Summer Semester		
Required Credits: 6		
AHM 2903	Human Factors	3
AES 1013	Arabic Communications I	3

Year 2 Semester 3		
Required Credits: 15		
AHM 2005	Aviation Legislation (Mod 10 B1 & B2)	5
AHV 2610	Materials and Hardware	10

Year 2 Semester 4		
Required Credits: 23		
AHV 2715	Maintenance Practices	15
AHV 3405	Propulsion	5
LSC 2103	Academic Reading and Writing II	3
Summer Semester		
Required Credits: 0		
AHM 3004	Work Placement CC	0

Year 3 Semester 5		
Required Credits: 21		
AHV 3342	Aircraft Aerodynamics, Structures and Systems *1 yr course (CC)	21

Year 3 Semester 6		
Required Credits: 21		
AHV 3342	Aircraft Aerodynamics, Structures and Systems	21
Summer Semester		
Required Credits: 7		
AHM 3004	Work Placement	4
AES 1003	Emirati Studies	3

Year 4 Semester 7		
Required Credits: 12		
EMM 4203	Aviation Operations Management	3
EMM 4403	Human Resources and Relations Management	3
LSC 1503	Academic Spoken Communication	3
MTH 1113	Statistics for Engineering	3

Year 4 Semester 8		
Required Credits: 12		
EMM 4103	Total Quality Management in Aviation	3
EMM 4303	Aviation Project Management	3
LSC 2183	English for Specific Purposes	3
LSS 1123	Basic Methods of Scientific Research and Development	3

Bachelor of Applied Science in Aeronautical Engineering Technology

The programme produces graduates with practical skills for the design, manufacturing, maintenance, operations, and support of aero-vehicles. Specifically, this programme prepares students for positions as engineers with the technical and managerial skills necessary to enter careers in the aircraft manufacturing, aviation operations, and related management sectors.

* CLICK HERE or go to page 125 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Aeronautical Engineering Core Courses		Course Credits
Required Credits: 48		
AET 2111	Fluid Dynamics	3
AET 2112	Electric Fundamentals I – DC (MOD 3, B1)	3
AET 2113	Electronic Fundamentals (MOD 4, B1)	3
AET 2114	Aircraft Materials	3
AET 2211	Fundamentals of Flight	3
AET 2212	Electric Fundamentals II – AC (MOD 3, B1)	3
AET 2213	Aerodynamics I	3
AET 2214	Engineering Mechanics	3
AET 3111	Aero Engineering Thermodynamics	3
AET 3112	Applied Engineering Mechanics	3
AET 3113	Airframe Structures	3
AET 4003	Aeronautical Project I	3
AET 4023	Aeronautical Project II	3
AET 4111	Energy and Propulsion	3
AET 4211	Computer-Aided Analysis for Aero-Mechanical Design	3
AET 4212	Aviation Legislation	3

General Engineering Core Courses		Course Credits
Required Credits: 25		
EGN 1103	Engineering Measurements and CAD Introduction	3
EGN 3103	Project Management	3
EGN 3203	Engineering Economics	3
EGN 3313	Engineering Practice & Leadership	3
EGN 3333	Health Safety & Environment	3
EMC 2003	Computer Aided Drafting	3
EMC 3013	Fabrication and Welding	3
ERK 3004	Work Placement	4

Aeronautical Engineering Elective Courses		Course Credits
Required Credits: 12		
AET 4311	Aircraft Structures Analysis	3
AET 4321	Aircraft Design	3
AET 4331	Composite Materials for Aerospace Applications	3
AET 4341	Control Systems	3
AET 4351	Aircraft Reliability and Maintenance Engineering	3
AET 4361	Aviation Management	3
AET 4371	Crew Resource Management and Human Factors	3
AET 4381	Rocket Science	3
AET 4391	Computational Aerodynamics	3

Mathematics and Science Required Courses		Course Credits
Required Credits: 18		
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3
MTH 2503	Linear Algebra and Differential Equations	3
MTH 3013	Calculus III	3
PHY 1203	Physics II	3

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics - MTH 1113 Statistics for Engineering	3
The Natural Sciences - PHY 1103 Physics I	3
The Social or Behavioural Sciences	6

Total Required Credits	*133*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*AETAB*
Industry Sponsored Programme	*No*	*Major Code*	*AET*

Ideal Semester Plan

Aeronautical Engineering Technology

		Course Credits
Year 1 Semester 1		
Required Credits: 18		
AES 1013	Arabic Communications I	3
EGN 1103	Engineering Measurements and CAD Introduction	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3
MTH 1103	Pre Calculus	3
PHY 1103	Physics I	3

		Course Credits
Year 1 Semester 2		
Required Credits: 18		
AES 1003	Emirati Studies	3
EMC 2003	Computer Aided Drafting	3
LSC 1503	Academic Communication	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3

Year 2 Semester 3		
Required Credits: 18		
AET 2111	Fluid Dynamics	3
AET 2112	Electric Fundamentals I DC (MOD 3, B1)	3
AET 2113	Electronic Fundamentals (MOD 4, B1)	3
AET 2114	Aircraft Materials	3
LSC 2183	English for Specific Purposes	3
MTH 2103	Calculus II	3

Year 2 Semester 4		
Required Credits: 15		
AET 2211	Fundamentals of Flight	3
AET 2212	Electric Fundamentals II AC (MOD 3, B1)	3
AET 2213	Aerodynamics I	3
AET 2214	Engineering Mechanics	3
MTH 2503	Linear Algebra and Differential Equations	3

Year 3 Semester 5		
Required Credits: 18		
AET 3111	Aero Engineering Thermodynamics	3
AET 3112	Applied Engineering Mechanics	3
AET 3113	Airframe Structures	3
EGN 3203	Engineering Economics	3
LSS 1123	Basic Methods of Scientific Research and Development	3
MTH 3013	Calculus III	3

Year 3 Semester 6		
Required Credits: 16		
EGN 3103	Project Management	3
EGN 3333	Health Safety & Environment	3
EMC 3013	Fabrication and Welding	3
ERK 3004	Work Placement	4
LSC 2103	Academic Reading and Writing II	3

Year 4 Semester 7		
Required Credits: 15		
AET 4003	Aeronautical Project I	3
AET 4111	Energy and Propulsion	3
EGN 3313	Engineering Practice & Leadership	3
Aeronautical Engineering Elective Course		3
Aeronautical Engineering Elective Course		3

Year 4 Semester 8		
Required Credits: 15		
AET 4023	Aeronautical Project II	3
AET 4211	Computer-Aided Analysis for Aero-Mechanical Design	3
AET 4212	Aviation Legislation	3
Aeronautical Engineering Elective Course		3
Aeronautical Engineering Elective Course		3

Bachelor of Applied Science in Chemical Engineering Technology

The programme covers the laws of chemistry, physics, and mathematics which form the basis of many industrial processes in areas such as energy, oil and gas, chemical processing, etc. The programme prepares the students for positions as engineers with the technical and managerial skills necessary to enter careers in the design, manufacturing, operation, and maintenance of chemical processes. Students will gain practical knowledge in heat and mass transfer in plants and process control design projects. Graduates typically have strengths in applied design, development and implementation of chemical engineering systems.

* CLICK HERE or go to page 126 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Chemical Engineering Core Courses		Course Credits
Required Credits: 73		
ECH 1103	Chemical Engineering Principles I	3
ECH 2013	Chemical Engineering Principles II	3
ECH 2033	Fluid Mechanics	3
ECH 2043	Analytical Chemistry	3
ECH 2053	Organic Chemistry	3
ECH 2063	Thermodynamics	3
ECH 2083	General Chemistry II	3
ECH 3003	Mass Transfer	3
ECH 3013	Materials and Corrosion	3
ECH 3023	Chemical Heat Transfer	3
ECH 3033	Electrical Fundamentals & Instrumentation	3
ECH 3043	Process Control: Chemical	3
ECH 3053	Unit Operation I	3
ECH 3063	Reaction Kinetics	3
ECH 4003	Chemical Engineering Design	3
ECH 4013	Design Project I	3
ECH 4023	Design Project II	3
ECH 4053	Chemical Engineering Simulation	3
EGN 1103	Engineering Measurements and CAD Introduction	3
EGN 3103	Project Management	3
EGN 3203	Engineering Economics	3
EGN 3313	Engineering Practice & Leadership	3
EGN 3333	Health Safety & Environment	3
ERK 3004	Work Placement	4

Chemical Engineering 4000 Elective Courses		Course Credits
See Programme Chair for available courses		
Required Credits: 12		
ECH 4073	Optimisation and Application in Refinery	3
ECH 4903	Chemical Process HAZOP and Risk Analysis	3
ECH 4913	Gas Processing	3
ECH 4933	Petroleum & Petrochemical Processing	3

Mathematics and Science Required Courses		Course Credits
Required Credits: 18		
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3
MTH 2503	Linear Algebra and Differential Equations	3
MTH 3013	Calculus III	3
ECH 1003	General Chemistry I	3

General Studies	
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics - MTH 1113 Statistics for Engineering	3
The Natural Sciences - PHY 1103 Physics I	3
The Social or Behavioural Sciences	6

Total Required Credits	*133*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*ECHAB*
Industry Sponsored Programme	*No*	*Major Code*	*ECH*

Ideal Semester Plan

Chemical Engineering Technology

		Course Credits
Year 1 Semester 1		
Required Credits: 18		
AES 1013	Arabic Communications I	3
EGN 1103	Engineering Measurements and CAD Introduction	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3
MTH 1103	Pre Calculus	3
PHY 1103	Physics I	3

		Course Credits
Year 1 Semester 2		
Required Credits: 18		
AES 1003	Emirati Studies	3
ECH 1003	General Chemistry I	3
ECH 1103	Chemical Engineering Principles I	3
LSC 1503	Academic Spoken Communication	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3

Year 2 Semester 3		
Required Credits: 18		
ECH 2013	Chemical Engineering Principles II	3
ECH 2083	General Chemistry II	3
ECH 3033	Electrical Fundamentals & Instrumentation	3
LSC 2183	English for Specific Purposes	3
LSC 2103	Academic Reading and Writing II	3
MTH 2103	Calculus II	3

Year 2 Semester 4		
Required Credits: 15		
ECH 2033	Fluid Mechanics	3
ECH 2043	Analytical Chemistry	3
ECH 2053	Organic Chemistry	3
ECH 2063	Thermodynamics	3
MTH 2503	Linear Algebra and Differential Equations	3

Year 3 Semester 5		
Required Credits: 15		
ECH 3013	Materials and Corrosion	3
ECH 3023	Chemical Heat Transfer	3
EGN 3203	Engineering Economics	3
LSS 1123	Basic Methods of Scientific Research and Development	3
MTH 3013	Calculus III	3

Year 3 Semester 6		
Required Credits: 16		
ECH 3003	Mass Transfer	3
ECH 3053	Unit Operation I	3
EGN 3103	Project Management	3
EGN 3333	Health Safety & Environment	3
ERK 3004	Work Placement	4

Year 4 Semester 7		
Required Credits: 18		
ECH 3063	Reaction Kinetics	3
ECH 4003	Chemical Engineering Design	3
ECH 4013	Design Project I	3
ECH 4053	Chemical Engineering Simulation	3
Chemical Engineering 4000 level Elective Course		3
Chemical Engineering 4000 level Elective Course		3

Year 4 Semester 8		
Required Credits: 15		
ECH 3043	Process Control: Chemical	3
ECH 4023	Design Project II	3
EGN 3313	Engineering Practice & Leadership	3
Chemical Engineering 4000 level Elective Course		3
Chemical Engineering 4000 level Elective Course		3

Bachelor of Applied Science in Civil Engineering Technology

The programme deals with the planning and design of buildings, bridges, transportation systems with particular attention to protection of the environment. It prepares students for positions as engineers with the technical and managerial skills necessary to enter careers in the planning, design, construction, operation and maintenance of infrastructure in a sustainable environment. Graduates have the ability to analyse and design systems, specify project methods and materials, perform cost estimates and analyses, and manage technical tasks in support of both public and private sector organisations in the civil engineering construction industry.

* CLICK HERE or go to page 126 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

		Course Credits
Civil Engineering Core Courses		
Required Credits: 73		
ECV 1003	Applied Drafting and CAD: Civil	3
ECV 1103	Construction Materials	3
ECV 2003	Soil Mechanics	3
ECV 2013	Engineering Mechanics	3
ECV 2023	Fluid Mechanics and Hydraulics	3
ECV 2033	Strength of Materials	3
ECV 2043	Foundation Engineering	3
ECV 2053	Site Surveying	3
ECV 3003	Highway Engineering	3
ECV 3013	Waste Water Engineering	3
ECV 3023	Quantity Surveying & Estimating	3
ECV 3033	Structural Analysis	3
ECV 3053	Water Resources and Supply	3
ECV 3063	Concrete Design	3
ECV 3073	Civil Engineering Construction	3
ECV 3263	Steel Design	3
ECV 4003	Civil Project I	3
ECV 4023	Civil Project II	3
ECV 4053	Environmental Engineering	3
EGN 1103	Engineering Measurements and CAD Introduction	3
EGN 3103	Project Management	3
EGN 3203	Engineering Economics	3
EGN 3313	Engineering Practice & Leadership	3
ERK 3004	Work Placement	4

		Course Credits
Civil Engineering 4000 Elective Courses		
See Programme Chair for available courses		
Required Credits: 12		
ECV 4803	Concrete Design II	3
ECV 4813	GIS Applications in Civil Engineering	3
ECV 4903	Road Design & Construction	3
ECV 4923	Construction Contract Management	3
ECV 4963	Solid Waste Management	3
ECV 4973	Research Methods in Engineering	3
ECV 4993	Transportation Planning	3

		Course Credits
Mathematics and Science Required Courses		
Required Credits: 18		
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3
MTH 2503	Linear Algebra and Differential Equations	3
MTH 3013	Calculus III	3
ECV 2073	Chemistry for Civil Engineering	3

General Studies	
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics - MTH 1113 Statistics for Engineering	3
The Natural Sciences - PHY 1103 Physics I	3
The Social or Behavioural Sciences	6

Total Required Credits	*133*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*ECVAB*
Industry Sponsored Programme	*No*	*Major Code*	*ECV*

Ideal Semester Plan

Civil Engineering Technology

		Course Credits
Year 1 Semester 1		
Required Credits: 18		
AES 1013	Arabic Communications I	3
EGN 1103	Engineering Measurements and CAD Introduction	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3
MTH 1103	Pre Calculus	3
PHY 1103	Physics I	3

		Course Credits
Year 1 Semester 2		
Required Credits: 18		
ECV 1003	Applied Drafting and CAD: Civil	3
ECV 1103	Construction Materials	3
ECV 2073	Chemistry for Civil Engineering	3
LSC 1503	Academic Spoken Communication	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3

Year 2 Semester 3		
Required Credits: 18		
ECV 2003	Soil Mechanics	3
ECV 2013	Engineering Mechanics	3
ECV 2023	Fluid Mechanics and Hydraulics	3
ECV 2053	Site Surveying	3
LSC 2183	English for Specific Purposes	3
MTH 2103	Calculus II	3

Year 2 Semester 4		
Required Credits: 18		
AES 1003	Emirati Studies	3
ECV 2033	Strength of Materials	3
ECV 2043	Foundation Engineering	3
ECV 3023	Quantity Surveying & Estimating	3
ECV 3073	Civil Engineering Construction	3
MTH 2503	Linear Algebra and Differential Equations	3

Year 3 Semester 5		
Required Credits: 15		
ECV 3003	Highway Engineering	3
ECV 3033	Structural Analysis	3
EGN 3203	Engineering Economics	3
LSS 1123	Basic Methods of Scientific Research and Development	3
MTH 3013	Calculus III	3

Year 3 Semester 6		
Required Credits: 16		
ECV 3053	Water Resources and Supply	3
ECV 3263	Steel Design	3
EGN 3103	Project Management	3
ERK 3004	Work Placement	4
LSC 2103	Academic Reading and Writing II	3

Year 4 Semester 7		
Required Credits: 15		
ECV 3013	Waste Water Engineering	3
ECV 3063	Concrete Design	3
ECV 4003	Civil Project I	3
Civil Engineering 4000 level Elective Course		3
Civil Engineering 4000 level Elective Course		3

Year 4 Semester 8		
Required Credits: 15		
ECV 4023	Civil Project II	3
ECV 4053	Environmental Engineering	3
EGN 3313	Engineering Practice & Leadership	3
Civil Engineering 4000 level Elective Course		3
Civil Engineering 4000 level Elective Course		3

Bachelor of Applied Science in Electrical Engineering Technology

The programme prepares graduates for positions in the engineering disciplines of power generation, transmission, distribution, and control of electric energy systems and related equipment. This programme prepares students for positions as engineers with the technical and managerial skills necessary to enter careers in the design, application, installation, and maintenance of electrical systems. Students gain experience in circuits, semiconductor devices, digital systems, programming, microcontrollers, power systems, industrial instrumentation, and system control. Graduates are well prepared for analysis, applied design, development and implementation of electrical systems.

* CLICK HERE or go to page 127 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Electrical Engineering Core Courses		Course Credits
Required Credits: 73		
EEC 1003	Electric Circuits I	3
EEC 2003	Electric Circuits II	3
EEC 2013	Digital Circuits	3
EEC 2033	Microcontroller Systems	3
EEC 2053	Electronics I	3
EEC 3003	Instrumentation & Control	3
EEC 3073	Signals & Systems	3
EEC 4043	Control Systems	3
EEL 2003	Power Electronics	3
EEL 2023	Power Generation & Transmission	3
EEL 2043	Principles of Machines and Power	3
EEL 3003	Electrical Machines	3
EEL 3013	Electrical Power Distribution	3
EEL 3023	System Protection & Coordination	3
EEL 4413	Power Systems Analysis	3
EGN 1103	Engineering Measurements and CAD Introduction	3
EGN 2003	Computer Programming	3
EGN 3103	Project Management	3
EGN 3203	Engineering Economics	3
EGN 3313	Engineering Practice & Leadership	3
EGN 3333	Health Safety & Environment	3
EGN 4003	Design Project I	3
EGN 4033	Design Project II	3
ERK 3004	Work Placement	4

Electrical Engineering 4000 Elective Courses		Course Credits
See Programme Chair for available courses		
Required Credits: 12		
EEC 4983	Digital Control Systems	3
EEL 4803	Electrical Drives	3
EEL 4813	Electrical Maintenance Operations	3
EEL 4993	Advanced Power Electronics	3
EGN 4023	Programmable Logic Controllers	3
EGN 4823	Industrial Problem Solving	3
EGN 4913	Renewable Energy Systems	3

Mathematics and Science Required Courses		Course Credits
Required Credits: 18		
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3
MTH 2503	Linear Algebra and Differential Equations	3
MTH 3013	Calculus III	3
PHY 1203	Physics II	3

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics - MTH 1113 Statistics for Engineering	3
The Natural Sciences - PHY 1103 Physics I	3
The Social or Behavioural Sciences	6

Total Required Credits	*133*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*EELAB*
Industry Sponsored Programme	*No*	*Major Code*	*EEL*

Ideal Semester Plan

Electrical Engineering Technology

		Course Credits
Year 1 Semester 1		
Required Credits: 18		
AES 1013	Arabic Communications I	3
EGN 1103	Engineering Measurements and CAD Introduction	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3
MTH 1103	Pre Calculus	3
PHY 1103	Physics I	3

		Course Credits
Year 1 Semester 2		
Required Credits: 18		
AES 1003	Emirati Studies	3
EEC 1003	Electric Circuits I	3
LSC 1503	Academic Spoken Communication	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3

Year 2 Semester 3		
Required Credits: 18		
EEC 2003	Electric Circuits II	3
EEC 2013	Digital Circuits	3
EEC 2053	Electronics I	3
EGN 2003	Computer Programming	3
LSC 2183	English for Specific Purposes	3
MTH 2103	Calculus II	3

Year 2 Semester 4		
Required Credits: 18		
EEC 2033	Microcontroller Systems	3
EEL 2003	Power Electronics	3
EEL 2023	Power Generation & Transmission	3
EEL 2043	Principles of Machines and Power	3
LSC 2103	Academic Reading and Writing II	3
MTH 2503	Linear Algebra and Differential Equations	3

Year 3 Semester 5		
Required Credits: 18		
EEC 3003	Instrumentation & Control	3
EEC 3073	Signals & Systems	3
EEL 3003	Electrical Machines	3
EEL 3013	Electrical Power Distribution	3
LSS 1123	Basic Methods of Scientific Research and Development	3
MTH 3013	Calculus III	3

Year 3 Semester 6		
Required Credits: 13		
EEL 3023	System Protection & Coordination	3
EGN 3103	Project Management	3
EGN 3333	Health Safety & Environment	3
ERK 3004	Work Placement	4

Year 4 Semester 7		
Required Credits:15		
EEC 4043	Control Systems	3
EGN 3203	Engineering Economics	3
EGN 4003	Design Project I	3
Electrical Engineering 4000 level Elective Course		3
Electrical Engineering 4000 level Elective Course		3

Year 4 Semester 8		
Required Credits: 15		
EEL 4413	Power Systems Analysis	3
EGN 3313	Engineering Practice & Leadership	3
EGN 4033	Design Project II	3
Electrical Engineering 4000 level Elective Course		3
Electrical Engineering 4000 level Elective Course		3

Bachelor of Applied Science in Electronic Engineering Technology

The programme prepares graduates for positions in the engineering disciplines of communications, instrumentation, controls, and related electronic systems. This programme prepares students for positions as engineers with the technical and managerial skills necessary to enter careers in the design, application, installation, and maintenance of electronic systems. Students gain experience in circuits, semiconductor devices, digital systems, programming, microcontrollers, embedded systems, industrial instrumentation, communication systems, and system control. Graduates are well prepared for analysis, applied design, development and implementation of electronic systems.

* CLICK HERE or go to page 127 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Electronic Engineering Core Courses		Course Credits
Required Credits: 73		
EEC 1003	Electric Circuits I	3
EEC 2003	Electric Circuits II	3
EEC 2013	Digital Circuits	3
EEC 2033	Microcontroller Systems	3
EEC 2053	Electronics I	3
EEC 3003	Instrumentation & Control	3
EEC 3013	Electronics II	3
EEC 3043	Communication Systems	3
EEC 3073	Signals & Systems	3
EEC 3103	Digital Communications	3
EEC 3503	Embedded System Design	3
EEC 4013	Data Communications & Networks	3
EEC 4043	Control Systems	3
EEL 2043	Principles of Machines and Power	3
EGN 1103	Engineering Measurements and CAD Introduction	3
EGN 2003	Computer Programming	3
EGN 3103	Project Management	3
EGN 3203	Engineering Economics	3
EGN 3313	Engineering Practice & Leadership	3
EGN 3333	Health Safety & Environment	3
EGN 4003	Design Project I	3
EGN 4023	Programmable Logic Controllers	3
EGN 4033	Design Project II	3
ERK 3004	Work Placement	4

Electronic Engineering 4000 Elective Courses		Course Credits
See Programme Chair for available courses		
Required Credits: 12		
EEC 4033	Programmable Devices	3
EEC 4053	VLSI Design	3
EEC 4943	Mobile Communications	3
EEC 4963	Digital Signal Processing	3
EEC 4983	Digital Control Systems	3
EEC 4993	Intelligent Systems	3
EEL 4903	Machine Control & Drives	3
EGN 4813	Robotics Technology	3
EGN 4823	Industrial Problem Solving	3
EGN 4913	Renewable Energy Systems	3

Mathematics and Science Required Courses		Course Credits
Required Credits: 18		
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3
MTH 2503	Linear Algebra and Differential Equations	3
MTH 3013	Calculus III	3
PHY 1203	Physics II	3

General Studies	
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics - MTH 1113 Statistics for Engineering	3
The Natural Sciences - PHY 1103 Physics I	3
The Social or Behavioural Sciences	6

Total Required Credits	*133*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*EECAB*
Industry Sponsored Programme	*No*	*Major Code*	*EEC*

Ideal Semester Plan

Electronic Engineering Technology

		Course Credits
Year 1 Semester 1		
Required Credits: 18		
AES 1013	Arabic Communications I	3
EGN 1103	Engineering Measurements and CAD Introduction	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3
MTH 1103	Pre Calculus	3
PHY 1103	Physics I	3

		Course Credits
Year 1 Semester 2		
Required Credits: 18		
AES 1003	Emirati Studies	3
EEC 1003	Electric Circuits I	3
LSC 1503	Academic Spoken Communication	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3

Year 2 Semester 3		
Required Credits: 18		
EEC 2003	Electric Circuits II	3
EEC 2013	Digital Circuits	3
EEC 2053	Electronics I	3
EGN 2003	Computer Programming	3
LSC 2183	English for Specific Purposes	3
MTH 2103	Calculus II	3

Year 2 Semester 4		
Required Credits: 18		
EEC 2033	Microcontroller Systems	3
EEC 3013	Electronics II	3
EEC 3043	Communication Systems	3
EEL 2043	Principles of Machines and Power	3
LSC 2103	Academic Reading and Writing II	3
MTH 2503	Linear Algebra and Differential Equations	3

Year 3 Semester 5		
Required Credits: 18		
EEC 3003	Instrumentation & Control	3
EEC 3073	Signals & Systems	3
EEC 3103	Digital Communications	3
EEC 3503	Embedded System Design	3
LSS 1123	Basic Methods of Scientific Research and Development	3
MTH 3013	Calculus III	3

Year 3 Semester 6		
Required Credits: 13		
EGN 3103	Project Management	3
EGN 3333	Health Safety & Environment	3
EGN 4023	Programmable Logic Controllers	3
ERK 3004	Work Placement	4

Year 4 Semester 7		
Required Credits: 15		
EEC 4043	Control Systems	3
EGN 3203	Engineering Economics	3
EGN 4003	Design Project I	3
Electronic Engineering 4000 level Elective Course		3
Electronic Engineering 4000 level Elective Course		3

Year 4 Semester 8		
Required Credits: 15		
EEC 4013	Data Communications & Networks	3
EGN 3313	Engineering Practice & Leadership	3
EGN 4033	Design Project II	3
Electronic Engineering 4000 level Elective Course		3
Electronic Engineering 4000 level Elective Course		3

Bachelor of Applied Science in Engineering Logistics Management

The programme has been designed to provide a range of core and specialist academic knowledge to cater to the differing demands within the logistics sector. Three German universities of applied sciences: Technical University of Applied Sciences, Wildau; University of Applied Sciences, Bremen; and Jade University of Applied Sciences are offering a joint Bachelor degree course in Logistics Management. This is based on their internationally accredited and widely renowned degree courses in Logistics, all with different fields of specialisation and synchronised and adapted to the demands in the UAE and HCT. The programme will equip graduates with the required knowledge, skills, and applied science essential for meeting the needs of the local and international industries.

* CLICK HERE or go to page 128 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

		Course Credits
Logistics Core Courses		
Required Credits: 54		
LOG 1003	Logistics Principles and Supply Chain Management	3
LOG 1103	Enterprise Information Management	3
LOG 2003	Transport General Basics and Technologies	3
LOG 2013	Strength of Materials	3
LOG 2103	Global Energy and Environmental Technology	3
LOG 2203	Materials Handling Technologies and Automation	3
LOG 2303	Telematics in Logistics	3
LOG 3003	Maritime Transport	3
LOG 3103	Specification of Technical Systems	3
LOG 3203	ERP I Principles	3
LOG 3302	Sales and Distribution in Logistics	2
LOG 3403	Transport and Economic Geography	3
LOG 3503	Planning of Warehouse Systems	3
LOG 3602	ERP 2 Applications	2
LOG 3702	Logistics Controlling	2
LOG 4912	Capstone Thesis Project	12

	Course Credits
General Studies	
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics - MTH 1113 Statistics for Engineering	3
The Natural Sciences - PHY 1103 Physics I	3
The Social or Behavioural Sciences	6

		Course Credits
Business and Engineering Core Courses		
Required Credits: 30		
BUS 2003	Business and Commercial Law	3
BUS 4353	International Human Resource Management	3
BUS 4533	International Quality Management System	3
ECV 1003	Applied Drafting and CAD: Civil	3
EGN 3103	Project Management	3
LOG 1203	Business Administration I	3
LOG 2402	Business Administration II	3
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3

		Course Credits
Aviation/Maritime and Public Transport Electives		
See Programme Chair for available courses		
Required Credits: 16		
LOG 4002	Work Experience	4
LOG 4003	GIS in Logistics	3
LOG 4103	Dangerous Goods	3
LOG 4203	Port Management	3
LOG 4303	Airport Management	3
LOG 4403	Road and Rail Freight	3
LOG 4503	Public Transport	3
LOG 4603	Airline Management	3
LOG 4703	Management of Distribution Networks	3
LOG 4803	National Transport and Planning Law	3
LOG 4904	Internship	4
MAR 3003	Transport and Maritime Law	3
MAR 4703	Shipping Management	3

Total Required Credits	*130*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*LOGAB*
Industry Sponsored Programme	*No*	*Major Code*	*LOG*

Ideal Semester Plan

Engineering Logistics Management

Year 1 Semester 1		Course Credits
Required Credits: 18		
AES 1013	Arabic Communications I	3
ECV 1003	Applied Drafting and CAD: Civil	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3
MTH 1103	Pre Calculus	3
PHY 1103	Physics I	3

Year 1 Semester 2		Course Credits
Required Credits: 18		
LOG 1003	Logistics Principles and Supply Chain Management	3
LSC 1503	Academic Spoken Communication	3
MTH 1113	Statistics for Engineering	3
LOG 1103	Enterprise Information Management	3
LOG 1203	Business Administration I	3
MTH 1203	Calculus I	3

Year 2 Semester 3		
Required Credits: 18		
BUS 2003	Business and Commercial Law	3
LSC 2183	English for Specific Purposes	3
LOG 2003	Transport General Basics and Technologies	3
LOG 2013	Strength of Materials	3
LOG 2402	Business Administration II	3
MTH 2103	Calculus II	3

Year 2 Semester 4		
Required Credits: 15		
AES 1003	Emirati Studies	3
LSC 2103	Academic Reading and Writing II	3
LOG 2103	Global Energy and Environmental Technology	3
LOG 2203	Materials Handling Technologies and Automation	3
LOG 2303	Telematics in Logistics	3

Year 3 Semester 5		
Required Credits: 17		
BUS 4353	International Human Resource Management	3
LSS 1123	Basic Methods of Scientific Research and Development	3
LOG 3003	Maritime Transport	3
LOG 3103	Specification of Technical Systems	3
LOG 3203	ERP I Principles	3
LOG 3302	Sales and Distribution in Logistics	2

Year 3 Semester 6		
Required Credits: 16		
BUS 4533	International Quality Management System	3
EGN 3103	Project Management	3
LOG 3403	Transport and Economic Geography	3
LOG 3503	Planning of Warehouse Systems	3
LOG 3602	ERP 2 Applications	2
LOG 3702	Logistics Controlling	2

Year 4 Semester 7		
Required Credits: 12		
Aviation/Maritime and Public Transport Elective		3
Aviation/Maritime and Public Transport Elective		3
Aviation/Maritime and Public Transport Elective		3
Aviation/Maritime and Public Transport Elective		3

Year 4 Semester 8		
Required Credits: 16		
LOG 4912	Capstone Thesis Project	12
Aviation/Maritime and Public Transport Elective		4

Bachelor of Applied Science in Mechanical Engineering Technology

The programme deals with the manipulation of energy through useful mechanical devices and the application of thermodynamics and heat transfer systems. The programme prepares students for positions as engineers with the knowledge, problem solving ability, and managerial skills to enter careers in the design, installation, manufacturing, testing and maintenance of mechanical systems. Students will gain expertise in mechanical design, turbomachinery and process control. Graduates typically have strengths in the analysis, applied design, development and implementation of mechanical systems and processes.

* CLICK HERE or go to page 128 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Mechanical Engineering Core Courses		Course Credits
Required Credits: 73		
EEC 2073	Electrical Engineering Fundamentals	3
EGN 1103	Engineering Measurements and CAD Introduction	3
EGN 3033	Heat Transfer	3
EGN 3103	Project Management	3
EGN 3203	Engineering Economics	3
EGN 3313	Engineering Practice & Leadership	3
EGN 3333	Health Safety & Environment	3
EGN 4003	Design Project I	3
EGN 4033	Design Project II	3
EMC 2003	Computer Aided Drafting	3
EMC 2013	Materials Selection and Testing	3
EMC 2023	Statics and Dynamics	3
EMC 2033	Manufacturing Technology	3
EMC 2043	Mechanics of Materials	3
EMC 2053	Fluid Mechanics	3
EMC 3003	Industrial Plant Maintenance	3
EMC 3013	Fabrication and Welding	3
EMC 3023	Thermodynamics I	3
EMC 3053	Thermodynamics II	3
EMC 3063	Mechanical Design I	3
EMC 3163	Process Control: Mechanical	3
EMC 4003	Turbomachinery	3
EMC 4043	Refrigeration and Air Conditioning System	3
ERK 3004	Work Placement	4

Mechanical Engineering 4000 Elective Courses		Course Credits
See Programme Chair for available courses		
Required Credits: 12		
EGN 4913	Renewable Energy Systems	3
EGN 4923	Engineering Design	3
EMC 4123	Gas Turbines	3
EMC 4143	Production Planning and Control (PPC)	3
EMC 4923	Desalination and Power	3
EMC 4963	Power Plant Engineering	3
EMC 4973	Computer Integrated Manufacturing	3
EMT 4923	Mechanical Vibrations	3

Mathematics and Science Required Courses		Course Credits
Required Credits: 18		
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3
MTH 2503	Linear Algebra and Differential Equations	3
MTH 3013	Calculus III	3
PHY 1203	Physics II	3

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics - MTH 1113 Statistics for Engineering	3
The Natural Sciences - PHY 1103 Physics I	3
The Social or Behavioural Sciences	6

Total Required Credits	*133*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*EMCAB*
Industry Sponsored Programme	*No*	*Major Code*	*EMC*

Ideal Semester Plan

Mechanical Engineering Technology

		Course Credits
Year 1 Semester 1		
Required Credits: 18		
AES 1013	Arabic Communications I	3
EGN 1103	Engineering Measurements and CAD Introduction	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3
MTH 1103	Pre Calculus	3
PHY 1103	Physics I	3

		Course Credits
Year 1 Semester 2		
Required Credits: 18		
AES 1003	Emirati Studies	3
EMC 2003	Computer Aided Drafting	3
LSC 1503	Academic Spoken Communication	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3

Year 2 Semester 3		
Required Credits: 12		
EEC 2073	Electrical Engineering Fundamentals	3
EMC 2023	Statics and Dynamics	3
EMC 2033	Manufacturing Technology	3
MTH 2103	Calculus II	3

Year 2 Semester 4		
Required Credits: 18		
EMC 2013	Materials Selection and Testing	3
EMC 2043	Mechanics of Materials	3
EMC 2053	Fluid Mechanics	3
EMC 3003	Industrial Plant Maintenance	3
LSC 2103	Academic Reading and Writing II	3
MTH 2503	Linear Algebra and Differential Equations	3

Year 3 Semester 5		
Required Credits: 15		
EGN 3033	Heat Transfer	3
EGN 3203	Engineering Economics	3
EMC 3053	Thermodynamics II	3
EMC 3063	Mechanical Design I	3
MTH 3013	Calculus III	3

Year 3 Semester 6		
Required Credits: 13		
EGN 3103	Project Management	3
EGN 3333	Health Safety & Environment	3
EMC 3013	Fabrication and Welding	3
ERK 3004	Work Placement	4

Year 4 Semester 7		
Required Credits: 15		
EGN 4003	Design Project I	3
EMC 4003	Turbomachinery	3
EMC 4043	Refrigeration and Air Conditioning System	3
Mechanical Engineering 4000 Elective Course		3
Mechanical Engineering 4000 level Elective Course		3

Year 4 Semester 8		
Required Credits: 15		
EGN 3313	Engineering Practice & Leadership	3
EGN 4033	Design Project II	3
EMC 3163	Process Control: Mechanical	3
Mechanical Engineering 4000 level Elective Course		3
Mechanical Engineering 4000 level Elective Course		3

Bachelor of Applied Science in Mechatronic Engineering Technology

The programme combines the fields of mechanical and electronic systems for applications in automation, robotics and manufacturing plants. The programme prepares students for positions as engineers with the technical and managerial skills necessary to enter careers in the design, installation, manufacturing and maintenance of mechatronic systems. Students gain practical knowledge in manufacturing technology, programmable logic controllers and instrumentation and control systems. Graduates have skills in the analysis, applied design, development and implementation of mechatronic systems.

* CLICK HERE or go to page 129 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

	Mechatronic Engineering Core Courses	Course Credits
	Required Credits: 73	
EEC 2033	Microcontroller Systems	3
EEC 2073	Electrical Engineering Fundamentals	3
EEC 3003	Instrumentation & Control	3
EGN 1103	Engineering Measurements and CAD Introduction	3
EGN 2003	Computer Programming	3
EGN 3103	Project Management	3
EGN 3203	Engineering Economics	3
EGN 3313	Engineering Practice & Leadership	3
EGN 3333	Health Safety & Environment	3
EGN 4003	Design Project I	3
EGN 4023	Programmable Logic Controllers	3
EGN 4033	Design Project II	3
EGN 4813	Robotics Technology	3
EMC 2003	Computer Aided Drafting	3
EMC 2013	Materials Selection and Testing	3
EMC 2023	Statics and Dynamics	3
EMC 2033	Manufacturing Technology	3
EMC 2043	Mechanics of Materials	3
EMT 2023	Electromechanical Systems	3
EMT 2033	Electronics Systems & Circuits	3
EMC 2223	Fluid Power	3
EMT 3013	Thermofluid Systems	3
EMT 4013	Industrial Control Systems	3
ERK 3004	Work Placement	4

	Mechatronic Engineering 4000 Elective Courses	Course Credits
	See Programme Chair for available courses	
	Required Credits: 12	
EGN 4913	Renewable Energy Systems	3
EGN 4923	Engineering Design	3
EMC 3163	Process Control: Mechanical	3
EMC 4043	Refrigeration and Air Conditioning System	3
EMC 4123	Gas Turbines	3
EMC 4143	Production Planning and Control (PPC)	3
EMC 4923	Desalination and Power	3
EMC 4963	Power Plant Engineering	3
EMC 4973	Computer Integrated Manufacturing	3
EMT 4923	Mechanical Vibrations	3

	Mathematics and Science Required Courses	Course Credits
	Required Credits: 18	
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3
MTH 2503	Linear Algebra and Differential Equations	3
MTH 3013	Calculus III	3
PHY 1203	Physics II	3

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics - MTH 1113 Statistics for Engineering	3
The Natural Sciences - PHY 1103 Physics I	3
The Social or Behavioural Sciences	6

Total Required Credits	*133*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*EMTAB*
Industry Sponsored Programme	*No*	*Major Code*	*EMT*

Ideal Semester Plan

Mechatronic Engineering Technology

		Course Credits
Year 1 Semester 1		
Required Credits: 18		
AES 1013	Arabic Communications I	3
EGN 1103	Engineering Measurements and CAD Introduction	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3
MTH 1103	Pre Calculus	3
PHY 1103	Physics I	3

		Course Credits
Year 1 Semester 2		
Required Credits: 18		
AES 1003	Emirati Studies	3
EMC 2003	Computer Aided Drafting	3
LSC 1503	Academic Spoken Communication	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3

Year 2 Semester 3		
Required Credits: 18		
EEC 2073	Electrical Engineering Fundamentals	3
EMC 2023	Statics and Dynamics	3
EMC 2033	Manufacturing Technology	3
LSC 2183	English for Specific Purposes	3
LSC 2103	Academic Reading and Writing II	3
MTH 2103	Calculus II	3

Year 2 Semester 4		
Required Credits: 18		
EEC 3003	Instrumentation & Control	3
EMC 2013	Materials Selection and Testing	3
EMC 2043	Mechanics of Materials	3
EMT 2023	Electromechanical Systems	3
EMT 2033	Electronics Systems & Circuits	3
MTH 2503	Linear Algebra and Differential Equations	3

Year 3 Semester 5		
Required Credits: 18		
EEC 2033	Microcontroller Systems	3
EGN 2003	Computer Programming	3
EGN 3203	Engineering Economics	3
EMT 3013	Thermofluid Systems	3
LSS 1123	Basic Methods of Scientific Research and Development	3
MTH 3013	Calculus III	3

Year 3 Semester 6		
Required Credits: 13		
EGN 3103	Project Management	3
EGN 3333	Health Safety & Environment	3
EMC 2223	Fluid Power	3
ERK 3004	Work Placement	4

Year 4 Semester 7		
Required Credits: 15		
EGN 4003	Design Project I	3
EGN 4023	Programmable Logic Controllers	3
EGN 4813	Robotics Technology	3
Mechatronic	Engineering 4000 Elective Course	3
Mechatronic	Engineering 4000 Elective Course	3

Year 4 Semester 8		
Required Credits: 15		
EGN 3313	Engineering Practice & Leadership	3
EGN 4033	Design Project II	3
EMT 4013	Industrial Control Systems	3
Mechatronic	Engineering 4000 Elective Course	3
Mechatronic	Engineering 4000 Elective Course	3

Bachelor of Applied Science in Petroleum Engineering Technology

This programme provides UAE nationals with the necessary skills to take up employment as engineers in the oil and gas industry in the country. Petroleum engineering technology professionals use their expertise in physics, chemistry, mathematics, geology, engineering applications, and communications to strike a balance between environmental impact and affordable supply.

* CLICK HERE or go to page 129 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Petroleum Engineering Core Courses		Course Credits
Required Credits: 39		
EPT 1102	Introduction to Petroleum Engineering	2
EPT 2002	Physical Geology	2
EPT 2043	Fluid Mechanics and Heat Transfer	3
EPT 2053	Reservoir Petrophysics	3
EPT 2063	Reservoir Fluids	3
EPT 3003	Drilling Engineering	3
EPT 3013	Reservoir Engineering I	3
EPT 3023	Well Performance	3
EPT 3053	Completion and Workover	3
EPT 3063	Reservoir Engineering II	3
EPT 3073	Reservoir Characterisation	3
EPT 4002	Design Project I	2
EPT 4022	Design Project II	2
EPT 4102	Petroleum Production Systems	2
EPT 4112	Petroleum Economics and Risk Analysis	2

Petroleum Engineering Elective Courses		Course Credits
Required Credits: 12		
EPT 4203	Reservoir Simulation	3
EPT 4213	Well Test Analysis and Design	3
EPT 4223	Advanced Drilling Engineering	3
EPT 4233	Geostatistics	3
EPT 4243	Natural Gas Production	3
EPT 4253	Enhanced Oil Recovery	3
EPT 4263	Petroleum Engineering Numerical Analysis	3
EPT 4273	Separation and Treatment of Petro Fluids	3
EPT 4283	Well Completion and Stimulation	3
EPT 4293	Production Engineering	3

Engineering Technology Core Courses		Course Credits
Required Credits: 34		
ECH 1003	General Chemistry I	3
ECH 2063	Thermodynamics	3
ECH 2083	General Chemistry II	3
EGN 1103	Engineering Measurements and CAD Introduction	3
EGN 3103	Project Management	3
EGN 3203	Engineering Economics	3
EGN 3313	Engineering Practice & Leadership	3
EGN 3333	Health Safety & Environment	3
EMC 2023	Statics and Dynamics	3
EMC 2043	Mechanics of Materials	3
ERK 3004	Work Placement	4

Mathematics and Science Required Courses		Course Credits
Required Credits: 18		
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3
MTH 2503	Linear Algebra and Differential Equations	3
MTH 3013	Calculus III	3
PHY 1203	Physics II	3

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics - MTH 1113 Statistics for Engineering	3
The Natural Sciences - PHY 1103 Physics I	3
The Social or Behavioural Sciences	6

Total Required Credits	*133*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*EPTAB*
Industry Sponsored Programme	*Yes*	*Major Code*	*EPT*

Ideal Semester Plan

Petroleum Engineering Technology

		Course Credits
Year 1 Semester 1		
Required Credits: 18		
AES 1013	Arabic Communications I	3
EGN 1103	Engineering Measurements and CAD Introduction	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3
MTH 1103	Pre Calculus	3
PHY 1103	Physics I	3

		Course Credits
Year 1 Semester 2		
Required Credits: 17		
ECH 1003	General Chemistry I	3
EPT 1102	Introduction to Petroleum Engineering	2
LSC 1503	Academic Spoken Communication	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3

Year 2 Semester 3		
Required Credits: 17		
ECH 2063	Thermodynamics	3
ECH 2083	General Chemistry II	3
EMC 2023	Statics and Dynamics	3
EPT 2002	Physical Geology	2
LSC 2183	English for Specific Purposes	3
MTH 2103	Calculus II	3

Year 2 Semester 4		
Required Credits: 18		
AES 1003	Emirati Studies	3
EMC 2043	Mechanics of Materials	3
EPT 2043	Fluid Mechanics and Heat Transfer	3
EPT 2053	Reservoir Petrophysics	3
EPT 2063	Reservoir Fluids	3
MTH 2503	Linear Algebra and Differential Equations	3

Year 3 Semester 5		
Required Credits: 18		
EGN 3203	Engineering Economics	3
EPT 3003	Drilling Engineering	3
EPT 3013	Reservoir Engineering I	3
EPT 3023	Well Performance	3
LSS 1123	Basic Methods of Scientific Research and Development	3
MTH 3013	Calculus III	3

Year 3 Semester 6		
Required Credits: 19		
EGN 3103	Project Management	3
EGN 3333	Health Safety & Environment	3
EPT 3053	Completion and Workover	3
EPT 3063	Reservoir Engineering II	3
EPT 3073	Reservoir Characterisation	3
ERK 3004	Work Placement	4

Year 4 Semester 7		
Required Credits: 13		
EPT 4002	Design Project I	2
EPT 4102	Petroleum Production Systems	2
LSC 2103	Academic Reading and Writing II	3
Petroleum Engineering Elective Course		3
Petroleum Engineering Elective Course		3

Year 4 Semester 8		
Required Credits: 13		
EGN 3313	Engineering Practice & Leadership	3
EPT 4022	Design Project II	2
EPT 4112	Petroleum Economics and Risk Analysis	2
Petroleum Engineering Elective Course		3
Petroleum Engineering Elective Course		3

Health Sciences

Health Sciences is emerging as one of the UAE's largest growth areas. Student learning takes place in classrooms, laboratories, clinics, and hospital settings where training covers the knowledge, skills, attitudes, and behaviours expected of a modern health science professional.

The HCT Health Sciences programmes and courses are designed to meet the highest academic and industry standards and as a result our graduates are highly sought after by employers. Health Sciences graduates can expect to work in a number of different areas including hospitals, government, laboratories, education, and a large range of private and semi-private health-related organisations.

Bachelor of Applied Science in Emergency Medical Services

The Bachelor of Applied Science in Emergency Medical Services is a four-year post-Foundations programme that combines general studies with comprehensive paramedic instruction. The programme is run in partnership with local government agencies in the United Arab Emirates and seeks to train candidates to manage and lead in pre-hospital care settings. Over the four years, the students will be trained in basic, intermediate and advanced life support skills. This knowledge and the skills will be complemented by courses that encourage students to be leaders in the field through research, education and management. The course involves classroom and skills laboratory work, as well as work based experience through preceptors both pre-hospital and in-hospital. As a sponsored programme, graduates will enter into a contract that ensures them employment in the Emergency Medical Services. They can go on to be operations experts, supervisors or managers in the field of Emergency Medical Care and other allied health sciences. The Higher Colleges of Technology seeks to provide our learners with the opportunities to develop, enhance and advance in the emergency care profession.

* CLICK HERE or go to page 129 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Emergency Medical Services Core Courses		Course Credits
Required Credits: 71		
HEM 2106	EMT Basic (I)	6
HEM 2207	EMT Basic (II)	7
HEM 2304	EMT Advanced (I)	4
HEM 2404	EMT Advanced (II)	4
HEM 2508	EMT Advanced (III)	8
HEM 3108	EMT Paramedic (I)	8
HEM 3208	EMT Paramedic (II)	8
HEM 4003	Advanced Pharmacology	3
HEM 4103	Emergency Medical Services Management	3
HEM 4203	Evidence Based Medicine and Research Analysis	3
HEM 4303	Advanced Clinical Practice	3
HEM 4478	International Trip Option for Paramedics	8
HSC 1203	Anatomy & Physiology II	3
HSC 1803	Medical Terminology for Health Sciences	3

Emergency Medical Services Preceptorship Courses		Course Credits
Required Credits: 22		
HEM 2902	Ambulance Preceptorship I	3
HEM 2922	Ambulance Preceptorship II	3
HEM 3902	Hospital Ambulance Preceptorship I	3
HEM 3922	Hospital Ambulance Preceptorship II	3
HEM 3944	Summer Preceptorship	5
HEM 4944	International Preceptorship	5

Emergency Medical Services Elective		
See Programme Chair for available courses.		
Required Credits: 8		
HEM 4418	Advanced Clinical Supervision	8

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences (HSC 1103 Anatomy & Physiology I)	3
The Social or Behavioural Sciences	6

Total Required Credits	*131*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*HEMAB*
Cost Recovery Programme	*Yes*	*Major Code*	*HEM*

Ideal Semester Plan

Emergency Medical Services

		Course Credits
Year 1 Semester 1		
Required Credits: 18		
HEM 2106	EMT Basic (I)	6
HSC 1803	Medical Terminology for Health Sciences	3
HSC 1103	Anatomy & Physiology I	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3

		Course Credits
Year 1 Semester 2		
Required Credits: 16		
AES 1013	Arabic Communications I	3
HEM 2207	EMT Basic (II)	7
HSC 1203	Anatomy & Physiology II	3
LSM 1113	Statistical Mathematics	3

Year 2 Semester 3		
Required Credits: 17		
AES 3003	Professional Arabic	3
HEM 2304	EMT Advanced (I)	4
HEM 2404	EMT Advanced (II)	4
HEM 2902	Ambulance Preceptorship I	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 19		
AES 1003	Emirati Studies	3
HEM 2508	EMT Advanced (III)	8
HEM 2922	Ambulance Preceptorship II	3
HEM 3944	Summer Preceptorship	5

Year 3 Semester 5		
Required Credits: 17		
HEM 3108	EMT Paramedic (I)	8
HEM 3902	Hospital Ambulance Preceptorship I	3
LSC 2183	English for Specific Purposes	3
LSS 1123	Basic Methods of Scientific Research and Development	3

Year 3 Semester 6		
Required Credits: 16		
HEM 3208	EMT Paramedic (II)	8
HEM 3922	Hospital Ambulance Preceptorship II	3
HEM 4944	International Preceptorship	5

Year 4 Semester 7		
Required Credits: 12		
HEM 4003	Advanced Pharmacology	3
HEM 4103	Emergency Medical Services Management	3
HEM 4203	Evidence Based Medicine and Research Analysis	3
HEM 4303	Advanced Clinical Practice	3

Year 4 Semester 8		
Required Credits: 16		
HEM 4478	International Trip Option for Paramedics	8
Emergency Medical Services Elective Course		8

Bachelor of Science in Health Information Management

The Bachelor of Science in Health Information Management programme is a four-year post-Foundations programme preparing graduates for health information management professional practice. In the first two programme years students develop an extensive knowledge of health care coding and introductory management studies. The final two years of the programme develop students' skills in health informatics, research, quality, advanced data management, leadership and health data analysis. The programme promotes the development of analytical thinking, problem-solving abilities, communication skills, professional ethics, social responsibility, professional citizenship, the ability to adapt to change and respond to challenges in health information management, and a commitment to lifelong learning.

* CLICK HERE or go to page 130 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

		Course Credits
Health Information Management Core Courses		
Required Credits: 57		
HIM 1203	Health Information Coding I (Introduction)	3
HIM 2003	Health Information Coding II (Intermediate)	3
HIM 2103	Applied Pathophysiology for Health Information Management	3
HIM 2203	Health Information Management Studies	3
HIM 2303	Health Information Coding III (Advanced)	3
HIM 2403	Introduction to Management in Healthcare	3
HIM 3003	Biostatistics	3
HIM 3103	Health Informatics I	3
HIM 3203	Health Informatics II	3
HIM 3303	Epidemiology	3
HIM 4003	Intermediate Management in Health Care	3
HIM 4103	Health Data Analysis	3
HIM 4203	Research Methods in Health Care	3
HIM 4303	Health Care Economics and Health Insurance	3
HIM 4403	Advanced Management in Health Care	3
HSC 1003	Introduction to Healthcare Systems	3
HSC 1203	Anatomy & Physiology II	3
HSC 1803	Medical Terminology for Health Sciences	3
HSC 2203	Psychology	3

		Course Credits
Health Information Field Courses		
Required Credits: 18		
HIM 2903	Health Information Management Hospital Preceptorship	4
HIM 2923	Coding Practicum	4
HIM 3902	Work Experience for Health Information Management	5
HIM 4924	Professional Experience	5

		Course Credits
Information Technology Core Courses		
Required Credits: 15		
CIA 3103	Database Design and Administration	3
CIA 4203	Enterprise Database Applications	3
CIS 1303	Data and Information Management	3
CIS 1403	Fundamentals of Programming	3
CIS 3103	Project Management	3

	Course Credits
General Studies	
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences (HSC 1103 Anatomy & Physiology I)	3
The Social or Behavioural Sciences	6

Total Required Credits	*120*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*HIMAB*
Cost Recovery Programme	*No*	*Major Code*	*HIM*

Ideal Semester Plan

Health Information Management

		Course Credits
Year 1 Semester 1		
Required Credits: 15		
HSC 1003	Introduction to Healthcare Systems	3
HSC 1103	Anatomy & Physiology I	3
HSC 1803	Medical Terminology for Health Sciences	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3

		Course Credits
Year 1 Semester 2		
Required Credits: 15		
AES 1003	Emirati Studies	3
CIS 1303	Data and Information Management	3
HIM 1203	Health Information Coding I (Introduction)	3
HSC 1203	Anatomy & Physiology II	3
LSS 1123	Basic Methods of Scientific Research and Development	3

Year 2 Semester 3		
Required Credits: 16		
HIM 2003	Health Information Coding II (Intermediate)	3
HIM 2103	Applied Pathophysiology for Health Information Management	3
HIM 2203	Health Information Management Studies	3
HIM 2903	Health Information Management Hospital Preceptorship	4
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 19		
AES 1013	Arabic Communications I	3
CIS 1403	Fundamentals of Programming	3
HIM 2303	Health Information Coding III (Advanced)	3
HIM 2403	Introduction to Management in Healthcare	3
HIM 2923	Coding Practicum	4
LSM 1113	Statistical Mathematics	3

Year 3 Semester 5		
Required Credits: 15		
AES 3003	Professional Arabic	3
CIA 3103	Database Design and Administration	3
HIM 3003	Biostatistics	3
HIM 3103	Health Informatics I	3
HSC 2203	Psychology	3

Year 3 Semester 6		
Required Credits: 14		
HIM 3203	Health Informatics II	3
HIM 3303	Epidemiology	3
HIM 3902	Work Experience for Health Information Management	5
LSC 2183	English for Specific Purposes	3

Year 4 Semester 7		
Required Credits: 12		
CIS 3103	Project Management	3
HIM 4003	Intermediate Management in Health Care	3
HIM 4103	Health Data Analysis	3
HIM 4203	Research Methods in Health Care	3

Year 4 Semester 8		
Required Credits: 14		
CIA 4203	Enterprise Database Applications	3
HIM 4303	Health Care Economics and Health Insurance	3
HIM 4403	Advanced Management in Health Care	3
HIM 4924	Professional Experience	5

Bachelor of Science in Medical Imaging

The Bachelor of Science in Medical Imaging programme is a four-year post-Foundations curriculum of undergraduate study to prepare graduates for entry into the UAE health care industry as diagnostic radiographers. Students will study a wide range of subjects to include biological sciences, radiographic anatomy and pathology, X-ray positioning and procedures, patient care and medical imaging technology. In addition, students will study the core elements of specialist medical imaging modalities such as computed tomography (CT), magnetic resonance imaging (MRI), mammography and ultrasound (US). The programme places a strong emphasis on linking classroom theory and laboratory simulation with supervised clinical practice in local hospitals and clinics. Employment opportunities for graduates are varied and exciting, ranging from X-ray in Primary Health Care Clinics to Diagnostic Imaging in specialised hospital Radiology Departments. Graduate employment rates are high as there is a continual demand for radiographers throughout the UAE.

* CLICK HERE or go to page 130 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

		Course Credits
Medical Imaging Core Courses		
Required Credits: 58		
HMI 1103	Introduction to Medical Imaging	3
HMI 2001	Patient Care I	1
HMI 2002	Medical Imaging Technology I	3
HMI 2102	Medical Imaging Technology II	3
HMI 2303	Medical Imaging Positioning and Procedures I	3
HMI 2403	Medical Imaging Anatomy and Pathology I	3
HMI 2503	Medical Imaging Positioning and Procedures II	3
HMI 2603	Medical Imaging Anatomy and Pathology II	3
HMI 3001	Patient Care II	1
HMI 3002	Medical Imaging Technology III	3
HMI 3102	Medical Imaging and Positioning III	3
HMI 3202	Specialised Imaging I	2
HMI 3212	Radiation Safety and Biology	2
HMI 3312	Cross-Sectional Anatomy	2
HMI 4002	Specialised Imaging II	2
HMI 4003	Quality Management in Medical Imaging	3
HMI 4102	Specialised Imaging Elective	3
HMI 4103	Research Project I	3
HMI 4203	Professional Practice	3
HMI 4303	Research Project II	3
HSC 1203	Anatomy & Physiology II	3
HSC 1803	Medical Terminology for Health Sciences	3

		Course Credits
Preceptorship Courses		
Required Credits: 33		
HMI 2904	Clinical Preceptorship I	5
HMI 3922	Clinical Preceptorship II	5
HMI 3934	Clinical Preceptorship III	5
HMI 3944	Clinical Preceptorship IV	9
HMI 4952	Clinical Preceptorship V	9

	Course Credits
General Studies	
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences (HSC 1103 Anatomy & Physiology I)	3
The Social or Behavioural Sciences	6

Total Required Credits	*121*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*HMIAB*
Cost Recovery Programme	*No*	*Major Code*	*HMI*

Ideal Semester Plan

Medical Imaging

Year 1 Semester 1		Course Credits
Required Credits: 15		
AES 1013	Arabic Communications I	3
HSC 1103	Anatomy & Physiology I	3
HSC 1803	Medical Terminology for Health Sciences	3
LSM 1113	Statistical Mathematics	3
LSS 1003	Life and Study Skills	3

Year 1 Semester 2		Course Credits
Required Credits: 12		
AES 1003	Emirati Studies	3
HMI 1103	Introduction to Medical Imaging	3
HSC 1203	Anatomy & Physiology II	3
LSC 1103	Academic Reading and Writing I	3

Year 2 Semester 3		
Required Credits: 13		
HMI 2001	Patient Care I	1
HMI 2002	Medical Imaging Technology I	3
HMI 2303	Medical Imaging Positioning and Procedures I	3
HMI 2403	Medical Imaging Anatomy and Pathology I	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 14		
HMI 2102	Medical Imaging Technology II	3
HMI 2503	Medical Imaging Positioning and Procedures II	3
HMI 2603	Medical Imaging Anatomy and Pathology II	3
HMI 2904	Clinical Preceptorship I (2 days per week)	5

Year 3 Semester 5		
Required Credits: 15		
AES 3003	Professional Arabic	3
HMI 3002	Medical Imaging Technology III	3
HMI 3102	Medical Imaging Positioning and Procedures III	3
HMI 3001	Patient Care II	1
HMI 3922	Clinical Preceptorship II (2 days per week)	5

Year 3 Semester 6		
Required Credits: 17		
HMI 3202	Specialized Imaging 1	2
HMI 3212	Radiation Safety and Biology	2
HMI 3312	Cross Sectional Anatomy	2
HMI 3934	Clinical Preceptorship III (2 days per week)	5
LSC 2183	English for Specific Purposes	3
LSS 1123	Basic Methods of Scientific Research and Development	3

Year 4 Semester 7		
Required Credits: 17		
HMI 4002	Specialized Imaging II	2
HMI 4003	Quality Management in Medical Imaging	3
HMI 4103	Research Project I	3
HMI 3944	Clinical Preceptorship IV (3 days per week)	9

Year 4 Semester 8		
Required Credits: 18		
HMI 4102	Specialized Imaging Elective	3
HMI 4203	Professional Practice	3
HMI 4303	Capstone Research Project	3
HMI 4952	Clinical Preceptorship V (3days per week)	9

Bachelor in Medical Laboratory Science

The Bachelor in Medical Laboratory Science is a four-year post-Foundations professional programme. Graduates are trained biomedical scientists who possess a broad range of knowledge in medical laboratory diagnostics with the ability to work proficiently and are culturally competent to deliver care to a wide range of clients/patients. The four years of undergraduate study integrates biomedical science theory, laboratory skills and supervised professional practice in a variety of clinical settings. Medical laboratory technologists are specialised in the area of clinical diagnostics, producing accurate results required by physicians and health care team members for treatment and management of patients and clients. Graduates possess professional knowledge in the areas of haematology, immunology, transfusion sciences, clinical chemistry, microbiology, molecular and cellular pathology, with the potential to specialise and advance their skills in specialist areas. These skills can be easily transferred to work competently in public health labs, municipality and forensic labs and in the biotechnology industry. Graduates who are successful in their programme are recognised internationally by the Institute of BioMedical Scientists (IBMS) in the United Kingdom, which provides access to society activities and programme recognition for those students who wish to advance their education into graduate studies.

* CLICK HERE or go to page 130 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Medical Laboratory Science Core Courses		Course Credits
Required Credits:70		
HML 1003	Haematology I	3
HML 1103	Microbiology I	3
HML 1203	Clinical Chemistry I	3
HML 1302	Basic Laboratory Skills	2
HML 2003	Haematology II	3
HML 2023	Haematology III	3
HML 2103	Microbiology II	3
HML 2123	Microbiology III	3
HML 2203	Clinical Chemistry II	3
HML 2223	Clinical Chemistry III	3
HML 2302	Transfusion Science I	2
HML 2342	Transfusion Science II	2
HML 3006	Clinical Correlations	6
HML 3022	Introduction to Basic Health Research	2
HML 3102	Cell Pathology I	2
HML 3122	Cell Pathology II	2
HML 3302	Immunology	2
HML 4003	Biology of Diseases	3
HML 4004	Laboratory Management	4
HML 4005	Laboratory Methodologies	5
HML 4102	Cell Pathology III	2
HML 4303	Techniques in Molecular Biology	3
HSC 1203	Anatomy & Physiology II	3
HSC 1803	Medical Terminology for Health Sciences	3

Clinical Field Courses		Course Credits
Required Credits: 24		
HML 3913	Clinical Placement I	4
HML 3925	Clinical Placement II	12
HML 4936	Capstone Project for Medical Laboratory Science	8

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences (HSC 1103 Anatomy & Physiology I)	3
The Social or Behavioural Sciences	6

Total Required Credits	*124*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*HMLAB*
Cost Recovery Programme	*No*	*Major Code*	*HML*

Ideal Semester Plan

Medical Laboratory Science

Year 1 Semester 1		Course Credits
Required Credits: 14		
AES 1003	Emirati Studies	3
HSC 1103	Anatomy & Physiology I	3
HML 1302	Basic Laboratory Skills	2
HSC 1803	Medical Terminology for Health Sciences	3
LSC 1103	Academic Reading and Writing I	3

Year 1 Semester 2		Course Credits
Required Credits: 15		
HSC 1203	Anatomy & Physiology II	3
HML 1003	Haematology I	3
HML 1103	Microbiology I	3
HML 1203	Clinical Chemistry I	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 3		
Required Credits: 14		
AES 1013	Arabic Communications I	3
HML 2003	Haematology II	3
HML 2103	Microbiology II	3
HML 2203	Clinical Chemistry II	3
HML 2302	Transfusion Science I	2

Year 2 Semester 4		
Required Credits: 17		
HML 2023	Haematology III	3
HML 2123	Microbiology III	3
HML 2223	Clinical Chemistry III	3
HML 2342	Transfusion Science II	2
LSS 1003	Life and Study Skills	3
LSS 1123	Basic Methods of Scientific Research and Development	3

Year 3 Semester 5		
Required Credits: 17		
AES 3003	Professional Arabic	3
HML 3006	Clinical Correlations	6
HML 3102	Cell Pathology I	2
HML 3302	Immunology	2
HML 3913	Clinical Placement I	4

Year 3 Semester 6		
Required Credits: 20		
HML 3122	Cell Pathology II	2
HML 3925	Clinical Placement II	12
LSC 2183	English for Specific Purposes	3
LSM 1113	Statistical Mathematics	3

Year 4 Semester 7		
Required Credits: 15		
HML 3022	Introduction to Basic Health Research	2
HML 4003	Biology of Diseases	3
HML 4005	Laboratory Methodologies	5
HML 4102	Cell Pathology III	2

Year 4 Semester 8		
Required Credits: 15		
HML 4004	Laboratory Management	4
HML 4303	Techniques in Molecular Biology	3
HML 4936	Capstone Project for Medical Laboratory Science	8

Bachelor of Science in Nursing

The Bachelor of Nursing programme is a four-year post-Foundations programme preparing graduates for professional nursing practice. Graduates are educated to provide evidence-based nursing care with a patient-centred focus. The programme stresses knowledge of the biological, social and clinical sciences that underlie nursing practice including health promotion, prevention and restorative care. Students undertake both theory and clinical education in the areas of medical surgical, pediatric (children), maternal child, mental health and community nursing. Students undertake studies in evidence-based practice, research, and scholarship as well as an understanding of global health trends and health policy development. The programme promotes the development of analytical thinking, problem-solving abilities, communication skills, professional ethics, social responsibility, professional citizenship, the ability to adapt to change and respond to challenges in nursing and a commitment to lifelong learning.

* CLICK HERE or go to page 131 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

		Course Credits
Nursing Core Courses		
Required Credits: 53		
HNR 1012	Introduction to Nursing Profession	2
HNR 1102	Medical Terminology for Nurses	2
HNR 1103	Nursing for Chronic Health Challenges	3
HNR 1602	Clinical Pharmacology	2
HNR 1702	Microbiology for Nursing	2
HNR 2005	Nursing for Acute Health Challenges	5
HNR 2012	Clinical Drug Calculation	2
HNR 2202	Health Promotion Skills Across the Lifespan	2
HNR 2215	Nursing Care of Family: Maternal, Infant and Child	5
HNR 3003	Mental Health Nursing	3
HNR 3013	Leadership and Quality Management in Nursing	3
HNR 3204	Public Health Nursing	4
HNR 3603	Introduction to Nursing Research and Evidence Based Practice	3
HNR 4003	Nursing Scholarship and Evidence Based Project I	3
HNR 4016	Nursing Care of Clients with Complex Health Challenges	6
HNR 4903	Nursing Scholarship and Evidence Based Project II	3
HSC 1203	Anatomy & Physiology II	3

		Course Credits
Nursing Clinical Courses		
Required Credits: 42		
HNR 1004	Integrated Nursing Therapeutics - Fundamentals	4
HNR 1925	Integrated Nursing Therapeutics - Chronic Health Challenges	5
HNR 2905	Integrated Nursing Therapeutics - Medical Surgical Nursing	5
HNR 2924	Integrated Nursing Therapeutics - Family, Maternal, Child	4
HNR 2934	Integrated Nursing Therapeutics - Mental Health Nursing	4
HNR 3904	Integrated Nursing Therapeutics - Public Health	4
HNR 3916	Integrated Nursing Therapeutics - Emergency and Critical Care	6
HNR 4910	Transition to Professional Nursing Practice	10

General Studies	
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences (HSC 1103 Anatomy & Physiology I)	3
The Social or Behavioural Sciences	6

Total Required Credits	*125*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*HNRAB*
Cost Recovery Programme	*No*	*Major Code*	*HNR*

Ideal Semester Plan

Science in Nursing

Year 1 Semester 1		Course Credits
Required Credits: 17		
HNR 1004	Integrated Nursing Therapeutics - Fundamentals	4
HNR 1012	Introduction to Nursing Profession	2
HNR 1102	Medical Terminology for Nurses	2
HSC 1103	Anatomy & Physiology I	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3

Year 1 Semester 2		Course Credits
Required Credits: 16		
HNR 1103	Nursing for Chronic Health Challenges	3
HNR 1702	Microbiology for Nursing	2
HNR 1925	Integrated Nursing Therapeutics - Chronic Health Challenges	5
HSC 1203	Anatomy & Physiology II	3
LSS 1123	Basic Methods of Scientific Research and Development	3

Year 2 Semester 3		
Required Credits: 20		
AES 1003	Emirati Studies	3
HNR 1602	Clinical Pharmacology	2
HNR 2005	Nursing for Acute Health Challenges	5
HNR 2012	Clinical Drug Calculation	2
HNR 2905	Integrated Nursing Therapeutics - Medical Surgical Nursing	5
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 17		
AES 1013	Arabic Communications I	3
HNR 2202	Health Promotion Skills Across the Lifespan	2
HNR 2215	Nursing Care of Family: Maternal, Infant and Child	5
HNR 2924	Integrated Nursing Therapeutics - Family, Maternal, Child	4
LSM 1113	Statistical Mathematics	3

Year 3 Semester 5		
Required Credits: 13		
AES 3003	Professional Arabic	3
HNR 2934	Integrated Nursing Therapeutics - Mental Health Nursing	4
HNR 3003	Mental Health Nursing	3
HNR 3013	Leadership and Quality Management in Nursing	3

Year 3 Semester 6		
Required Credits: 14		
NR 3204	Public Health Nursing	4
HNR 3603	Introduction to Nursing Research and Evidence Based Practice	3
HNR 3904	Integrated Nursing Therapeutics - Public Health	4
LSC 2183	English for Specific Purposes	3

Year 4 Semester 7		
Required Credits: 15		
NR 3916	Integrated Nursing Therapeutics - Emergency and Critical Care	6
HNR 4003	Nursing Scholarship and Evidence Based Project I	3
HNR 4016	Nursing Care of Clients with Complex Health Challenges	6

Year 4 Semester 8		
Required Credits: 13		
HNR 4903	Nursing Scholarship and Evidence Based Project II	3
HNR 4910	Transition to Professional Nursing Practice	10

Bachelor in Pharmacy

The Bachelor of Pharmacy programme is a four-year post-Foundations programme preparing graduates as Pharmacists for professional practice in different areas of Pharmacy. Graduates are educated to provide quality pharmaceutical care with a patient-centred focus. The programme stresses knowledge of the biological, chemical, pharmaceutical, clinical and social sciences that underpins pharmacy; an understanding of the relevance of that knowledge to patient care and pharmaceutical problem-solving and the skills to apply that knowledge to specific pharmaceutical care circumstances. The programme provides students with a firm foundation for lifelong learning by promoting the development of analytical thinking, problem-solving abilities, communication skills, technical skills, intellectual leadership potential and a commitment to professional ethics, social responsibility, professional citizenship and the ability to adapt to change and respond to challenges in pharmaceutical healthcare delivery.

* CLICK HERE or go to page 131 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Pharmacy Core Courses		Course Credits
Required Credits: 69		
HPH 1204	Foundation Chemistry for Pharmacy	4
HPH 1504	Introduction to Pharmacy	4
HPH 2002	Pharmaceutical Microbiology	2
HPH 2004	Biological Organic Chemistry	4
HPH 2103	Immunology	3
HPH 2204	Medicinal Chemistry I	4
HPH 2303	Pharmaceutics I	3
HPH 2405	Pharmacology	5
HPH 3013	Pathophysiology and Therapeutics I	3
HPH 3023	Medicinal Chemistry II	3
HPH 3033	Pharmaceutics II	3
HPH 3103	Pharmaceutics III	3
HPH 3123	Pharmaceutical Analysis	3
HPH 3163	Pathophysiology and Therapeutics II	3
HPH 4003	Bio-Technology	3
HPH 4013	Complementary Medicine	3
HPH 4023	Clinical Biochemistry and Toxicology	3
HPH 4073	Pathophysiology and Therapeutics III	3
HPH 4102	Pharmaceutical Care	2
HPH 4112	Research Project for Pharmacy	2
HSC 1203	Anatomy & Physiology II	3
HSC 1803	Medical Terminology for Health Sciences	3

Preceptorship Courses		Course Credits
Required Credits: 22		
HPH 3904	Community Pharmacy Preceptorship I	5
HPH 3954	Clinical Pharmacy Preceptorship I	5
HPH 4904	Clinical Pharmacy Preceptorship II	5
HPH 4924	Community Pharmacy Preceptorship II	5
HPH 4952	Industrial Pharmacy Preceptorship	2

General Studies	Course Credits
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences (HSC 1103 Anatomy & Physiology I)	3
The Social or Behavioural Sciences	6

Total Required Credits	*121*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*HPRAB*
Cost Recovery Programme	*No*	*Major Code*	*HPR*

Ideal Semester Plan

Pharmacy

		Course Credits
Year 1 Semester 1		
Required Credits: 15		
AES 1013	Arabic Communications I	3
HSC 1103	Anatomy & Physiology I	3
HSC 1803	Medical Terminology for Health Sciences	3
LSM 1113	Statistical Mathematics	3
LSS 1003	Life and Study Skills	3

		Course Credits
Year 1 Semester 2		
Required Credits: 14		
HPH 1204	Foundation Chemistry for Pharmacy	4
HPH 1504	Introduction to Pharmacy	4
HSC 1203	Anatomy & Physiology II	3
LSC 1103	Academic Reading and Writing I	3

Year 2 Semester 3		
Required Credits: 15		
AES 1003	Emirati Studies	3
HPH 2002	Pharmaceutical Microbiology	2
HPH 2004	Biological Organic Chemistry	4
HPH 2103	Immunology	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 4		
Required Credits: 15		
HPH 2204	Medicinal Chemistry I	4
HPH 2303	Pharmaceutics I	3
HPH 2405	Pharmacology	5
LSC 2183	English for Specific Purposes	3

Year 3 Semester 5		
Required Credits: 17		
AES 3003	Professional Arabic	3
HPH 3013	Pathophysiology and Therapeutics I	3
HPH 3023	Medicinal Chemistry II	3
HPH 3033	Pharmaceutics II	3
HPH 3904	Community Pharmacy Preceptorship I	5

Year 3 Semester 6		
Required Credits: 17		
HPH 3103	Pharmaceutics III	3
HPH 3123	Pharmaceutical Analysis	3
HPH 3163	Pathophysiology and Therapeutics II	3
HPH 3954	Clinical Pharmacy Preceptorship I	5
LSS 1123	Basic Methods of Scientific Research and Development	3

Year 4 Semester 7		
Required Credits: 12		
HPH 4003	Bio-Technology	3
HPH 4013	Complementary Medicine	3
HPH 4023	Clinical Biochemistry and Toxicology	3
HPH 4073	Pathophysiology and Therapeutics III	3

Year 4 Semester 8		
Required Credits: 16		
HPH 4102	Pharmaceutical Care	2
HPH 4112	Research Project for Pharmacy	2
HPH 4904	Clinical Pharmacy Preceptorship II	5
HPH 4924	Community Pharmacy Preceptorship II	5
HPH 4952	Industrial Pharmacy Preceptorship	2

Bachelor of Social Work

The Bachelor of Social Work programme prepares students for professional, generalist social work practice. The four-year programme provides graduates with theoretical and practical skills required to work as a professional social workers. Social workers help individuals, families, groups and communities to resolve problems and improve their social functioning. Social work practice utilises a social justice framework, counselling and advocacy skills and emphasises the importance of working with disadvantaged and marginalised individuals, groups and communities. Social workers address barriers, inequalities and injustices faced by many groups and sub-groups in the community. Social work education includes a knowledge base that examines human behaviour and complex social interactions. The programme incorporates extensive supervised professional fieldwork experience in relevant social work settings.

* CLICK HERE or go to page 131 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

		Course Credits
Social Work Core Courses		
Required Credits: 72		
HSC 1233	Human Growth and Development	3
HSC 2203	Psychology	3
HSC 2333	Sociology	3
HSW 1003	Introduction to Social Work	3
HSW 1023	Basic Counselling Skills	3
HSW 1033	Social Diversity and Justice	3
HSW 1203	Social Work in the UAE	3
HSW 1213	Abnormal and Clinical Psychology - Psychopathology	3
HSW 1243	Foundation in Case Work	3
HSW 2023	Advanced Counselling in Social Work	3
HSW 2033	Laws and Ethics in Social Work in the UAE	3
HSW 2043	Populations at Risk 1: Family & Children	3
HSW 2123	Human Behaviour and the Social Environment	3
HSW 2233	Foundation in Group Work	3
HSW 2243	Populations at Risk 2 : Aging, Special Needs	3
HSW 3033	Advanced Group Work	3
HSW 3043	Advanced Case Work	3
HSW 3223	Social Work Action and Advocacy	3
HSW 3513	Family Systems and Counselling	3
HSW 4013	Research Methodologies for Social Work	3
HSW 4023	Advanced Community Organisations	3
HSW 4213	Capstone Research Project	3
HSW 4223	Social Work Administration	3
HSW 4233	International Social Work - United Nations and other International Agencies	3

		Course Credits
Preceptorship Courses		
Required Credits: 18		
HSW 3913	Social Work Practicum I	3
HSW 3963	Social Work Practicum II	3
HSW 4916	Social Work Practicum III	6
HSW 4966	Social Work Practicum IV	6

	Course Credits
General Studies	
Required Credits: 30	
English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	6

Total Required Credits	*120*	*Minimum Duration of Study*	*4*
Maximum Duration of Study	*6*	*Programme Code*	*HSWAB*
Cost Recovery Programme	*No*	*Major Code*	*HSW*

Ideal Semester Plan

Social Work

Year 1 Semester 1		Course Credits
Required Credits: 15		
HSW 1003	Introduction to Social Work	3
HSW 1023	Basic Counselling Skills	3
HSW 1033	Social Diversity and Justice	3
LSC 1103	Academic Reading and Writing I	3
LSS 1003	Life and Study Skills	3

Year 1 Semester 2		Course Credits
Required Credits: 15		
AES 1003	Emirati Studies	3
HSC 2203	Psychology	3
HSW 1203	Social Work in the UAE	3
HSW 1243	Foundation in Case Work	3
LSC 2103	Academic Reading and Writing II	3

Year 2 Semester 3		
Required Credits: 18		
AES 1013	Arabic Communications I	3
HSW 1213	Abnormal and Clinical Psychology - Psychopathology	3
HSW 2123	Human Behaviour and the Social Environment	3
HSW 2023	Advanced Counselling in Social Work	3
HSW 2033	Laws and Ethics in Social Work in the UAE	3
HSW 2043	Populations at Risk 1: Family & Children	3

Year 2 Semester 4		
Required Credits: 15		
HSC 2333	Sociology	3
HSW 2233	Foundation in Group Work	3
HSW 2243	Populations at Risk 2 : Aging, Special Needs	3
LSM 1113	Statistical Mathematics	3
LSC 2183	English for Specific Purposes	3

Year 3 Semester 5		
Required Credits: 18		
AES 3003	Professional Arabic	3
HSW 3033	Advanced Group Work	3
HSW 3043	Advanced Case Work	3
HSW 3913	Social Work Practicum I	3
LSN 2103	Early Childhood Health and Wellness	3
LSH 2143	Leadership Communication	3

Year 3 Semester 6		
Required Credits: 15		
HSC 1233	Human Growth and Development	3
HSW 3223	Social Work Action and Advocacy	3
HSW 3513	Family Systems and Counselling	3
HSW 3963	Social Work Practicum II	3
LSS 1123	Basic Methods of Scientific Research and Development	3

Year 4 Semester 7		
Required Credits: 12		
HSW 4013	Research Methodologies for Social Work	3
HSW 4023	Advanced Community Organisations	3
HSW 4916	Social Work Practicum III	6

Year 4 Semester 8		
Required Credits: 15		
HSW 4223	Social Work Administration	3
HSW 4233	International Social Work - United Nations and other International Agencies	3
HSW 4966	Social Work Practicum IV	6
HSW 4213	Capstone Research Project	3

Foundations

The Foundations Studies Programme supports students needing assistance in meeting career programme entry requirements. The Foundations Studies Programme consists of four levels of English preparation and two levels of Mathematics. Depending on a student's entry level scores, a student may spend up to one year preparing to meet degree admission criteria. To exit Foundations, students must earn an IELTS overall band 5.0, or an accepted equivalence.

Course Offerings in Foundations

The Foundations Studies Programme supports students needing assistance in meeting career programme entry requirements. The Foundations Studies Programme consists of four levels of English preparation and two levels of mathematics. Depending on a student's entry level scores, a student may spend up to one year preparing to meet degree admission criteria. To exit Foundations, students must earn an IELTS overall band 5.0, or an accepted equivalence.

* CLICK HERE or go to page 131 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

Foundation English Courses	
FND 1016	Foundations English Level I
FND 2016	Foundations English Level II
FND 3016	Foundations English Level III
FND 4016	Foundations English Level IV

Foundation Mathematics Courses	
FND M010	Foundation Mathematics I
FND M020	Foundation Mathematics II

Maximum Duration of Study	*1*

General Studies

The General Studies Division is dedicated to supporting, developing and mentoring all HCT students to reach their full communicative, intellectual, literacy and vocational skills potential. This is achieved through a cross-curricula approach that challenges students to reflect and develop holistically by providing them with continual opportunities that broaden their global perspective, critical thinking, problem-solving and information synthesis skills in preparation for the knowledge economy of the 21st century in line with the UAE Vision 2021.

Course Offerings in General Studies

General Studies form a set of courses that all students must complete. General Studies complement core courses by challenging students to reflect and develop holistically. A continuous applied learning approach is offered that broadens students' global perspective, critical thinking, problem-solving and information synthesis skills in preparation for the knowledge economy of the 21st century. This is in line with the UAE Vision 2021. As a graduation requirement, all students are required to take a minimum of 30 credit units of General Studies in BAS programmes and 18 credits in Diploma programmes.

* CLICK HERE or go to page 132 to view the Programme Learning Outcomes (PLOs) for this Programme and/or Major

		Course Credits
English, Arabic or other Languages		
Required Credits: 15		
AES 1013	Arabic Communications I	3
AES 3003	Professional Arabic	3
LSC 1103	Academic Reading and Writing I	3
LSC 1503	Academic Spoken Communication	3
LSC 2103	Academic Reading and Writing II	3
LSC 2183	English for Specific Purposes	3

		Course Credits
Humanities or Arts		
Required Credits: 3		
AES 1003	Emirati Studies	3
LSH 2143	Leadership Communication	3

		Course Credits
Information Technology or Mathematics		
Required Credits: 3		
LSM 1003	Applied Mathematics	3
LSM 1103	Technical Mathematics	3
LSM 1113	Statistical Mathematics	3
LSM 1123	Quantitative Reasoning	3
MTH 1113	Statistics for Engineering	3

		Course Credits
The Natural Sciences		
Required Credits: 3		
AHM 1203	Aviation Physics	3
EDU 1803	Introduction to Math and Science in the Classroom	3
HSC 1103	Anatomy & Physiology I	3
HSC 1233	Human Growth and Development	3
LSN 1113	Introduction to Sustainability	3
LSN 2103	Early Childhood Health and Wellness	3
LSN 2433	Ecology	3
PHY 1103	Physics I	3

		Course Credits
The Social or Behavioural Sciences		
Required Credits: 6		
LSS 1003	Life and Study Skills	3
LSS 1123	Basic Methods of Scientific Research and Development	3
LSS 2113	Intercultural Studies	3
LSS 2533	Research Methods	3

Total Required Credits	*30*

Programme Learning Outcomes

Programme Learning Outcomes

Applied Communications

Includes all Majors:

Applied Media
Animation
Corporate and Media Communication
Fashion Design
Graphic Design
Video Production

PLO 1 Develop competency in core applied communication skills, including proficiency in a range of relevant media and communication tools, technology and practices.

PLO 2 Develop skills that can be used to describe, analyze, and evaluate theoretical and practical issues in a range of applied communication contexts.

PLO 3 Using visual, technical and critical skills, communicate ideas clearly and professionally about the industry and practice of the major.

PLO 4 Produce creative work demonstrating technical, aesthetic, and conceptual understanding of the industry and practice of the major.

PLO 5 Learn the professional skills and behaviours necessary to compete in the global marketplace for the major.

PLO 6 Demonstrate professional behaviour including the ability to communicate and lead in ways that are professional, ethical and socially responsible.

PLO 7 Demonstrate professional attitudes including commitment to lifelong independent learning, respect for diversity and informed appreciation of contemporary, societal and global issues.

Business

Includes all Majors:

Business Administration
- Accounting
- Finance and Banking
- Human Resource Management
- International Business Management
- Quality and Strategic Management
- Supply Chain Management

PLO 1 Synthetize specialized factual and theoretical knowledge and concepts of business disciplines to critically analyse and evaluate the challenges that arise in the continually changing business environment.

PLO 2 Demonstrate thorough understanding and analysis of specialized business issues or problems by making recommendations for improvements based on the application of concepts, skills, knowledge and techniques acquired in various business areas and effectively present findings using highly develop advanced communication and information technology skills.

PLO 3 Demonstrate the efficient integration of various advanced quantitative and qualitative analytical research tools using the latest available technology in evaluating complex cases and summarize your findings using different academic formats.

PLO 4 Demonstrate the ability to take responsibility to work alone or to be an efficient member, or a leader of a team working on applied projects to develop innovative and creative approaches to solve problems in varying business contexts.

PLO 5 Evaluate the professional performance and ethical behaviour of a team and the contribution of the individual team members when working on complex unfamiliar business projects.

Computer Information Science (Bachelor)

Common PLOs:

PLO 1 Apply knowledge of computing and mathematics appropriate to the discipline.

PLO 2 Analyse a problem, and identify and define the computing requirements appropriate to its solution.

PLO 3 Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.

PLO 4 Function effectively on teams to accomplish a common goal.

PLO 5 Understand professional, ethical, legal, security and social issues and responsibilities.

PLO 6 Communicate effectively with a range of audiences.

PLO 7 Analyse the local and global impact of computing on individuals, organisations, and society.

PLO 8: Recognise the need for and an engage in continuing professional development.

PLO 9: Use current techniques, skills, and tools necessary for computing practice.

Additional PLOs:

Business Solutions Major, Information Systems

PLO 10 Exhibit a critical awareness of a range of relevant principles and theoretical knowledge to develop strategies and solutions to business problems.

PLO 11 Demonstrate a critical awareness of the core functions of business administration (including management, accounting, human resources, and finance).

PLO 12 Employ analytical skills to formulate business solutions in order to manage and maintain organisations' information system effectively.

PLO 13 Determine e-business strategies and infrastructure requirements for an organisation to develop e-business applications.

Additional PLOs:

Applications Development Major, Information Technology

PLO 10 Demonstrate a critical awareness of a range of analysis, design and programming methods to solve complex business problems.

PLO 11 Develop secure desktop, web and mobile applications for multiple platforms using client-side and server side coding, and advanced database techniques.

PLO 12 Deploy applications for mobile devices using industry standard tools and practices for design, development and testing.

Additional PLOs:

Instructional Technology and Training Management Major, Information Technology

PLO 10 Exhibit critical knowledge of a range of learning styles and their application within technology-based instructional design.

PLO 11 Develop training programs aligned with organisation(s) vision, mission, and strategic goals.

PLO 12 Combine pedagogical principles and current technologies effectively to deliver and assess online and face to face training programs.

Additional PLOs:

Interactive Multimedia Technologies Major, Information Technology

PLO 10 Demonstrate a solid understanding of Interactive Multimedia Design principles.

PLO 11 Employ technical skills proficiency with industry-standard tools to produce interactive multimedia products.

PLO 12 Apply industry best practices and techniques for planning, designing and producing interactive multimedia products.

Additional PLOs:

Networking Major, Information Technology

PLO 10 Explain concepts and theories of networking and apply them to various situations, classifying networks, analysing performance, troubleshooting and implementing new technologies.

PLO 11 Design network infrastructure by selecting appropriate devices, topologies, protocols, systems software, network services and security.

PLO 12 Develop solutions for networking and security problems, balancing business concerns, technical issues and security.

Additional PLOs:

Security and Forensics Major, Information Technology

PLO 10 Critically consider relevant principles and theoretical knowledge to assess risk and develop policies and procedures to secure an

organisational information system.

PLO 11 Demonstrate the ability to identify security weaknesses using intrusion detection techniques and take corrective actions to secure information assets.

PLO 12 Employ advanced skills to conduct forensic investigations in line with local and international law and standards.

PLO 13 Deploy and manage secured client and server operating systems.

Computer Information Science (Diploma)

Applied Computer and Information Science

PLO 1 Apply basic skills & knowledge across selected pillars of information technology.

PLO 2 Identify, analyse & solve IT problems at technician level.

PLO 3 Apply skills & knowledge in specific technical areas as required by employers & other industry stakeholders.

PLO 4 Work effectively as an individual and as a member or leader of a team.

PLO 5 Demonstrate independent learning skills.

PLO 6 Engage in industry-appropriate professional communications.

PLO 7 Work effectively as an Office Administrator.

PLO 8 Provide professional office support to internal and external customers.

PLO 9 Prepare & deliver high-quality reports and presentations.

PLO 10 Administer electronic document workflows and office infrastructure.

Education

Education

PLO 1 Demonstrate and distinguish coherent, specialised, factual and theoretical knowledge of teaching and learning principles and concepts.

PLO 2 Apply teaching and learning principles, theoretical concepts and skills to a range of contexts and tasks in a learning environment.

PLO 3 Demonstrate independence in learning; transfer learning to new situations; reflect critically upon a range of issues, tasks and contexts.

PLO 4 Make informed decisions based on individual differences e.g. race, gender, ethnic and cultural perspectives.

PLO 5 Use appropriate technology to enhance teaching, learning, assessment and professional responsibilities.

Engineering Technology and Science

Applied Aviation Maintenance Technology: Airframe and Aeroengines

PLO 1 The student should be familiar with the basic elements of the subject.

PLO 2 The student should be able to give a simple description of the whole subject, using common words and examples.

PLO 3 The student should be able to use typical terms.

PLO 4 The student should be able to give a general description of the subject using, as appropriate, typical examples.

PLO 5 The student should be able to use mathematical formulae in conjunction with physical laws describing the subject.

PLO 6 The student should be able to read and understand sketches, drawings and schematics describing the subject.

PLO 7 The student should be able to apply his knowledge in a practical manner using detailed procedures.

PLO 8 The student should know the theory of the subject and interrelationships with other subjects.

PLO 9 The student should be able to give a detailed description of the subject using theoretical fundamentals and specific examples.

PLO 10 The student should understand and be able to use mathematical formulae related to the subject.

PLO 11 The student should be able to read, understand and prepare sketches, simple drawings and schematics describing the subject.

PLO 12 The student should be able to apply his knowledge in a practical manner using manufacturer's instructions.

PLO 13 The student should be able to interpret results

from various sources and measurements and apply corrective action where appropriate.

Applied Aviation Maintenance Technology: Avionics

PLO 1 The student should be familiar with the basic elements of the subject.

PLO 2 The student should be able to give a simple description of the whole subject, using common words and examples.

PLO 3 The student should be able to use typical terms.

PLO 4 The student should be able to give a general description of the subject using, as appropriate, typical examples.

PLO 5 The student should be able to use mathematical formulae in conjunction with physical laws describing the subject.

PLO 6 The student should be able to read and understand sketches, drawings and schematics describing the subject.

PLO 7 The student should be able to apply his knowledge in a practical manner using detailed procedures.

PLO 8 The student should know the theory of the subject and interrelationships with other subjects.

PLO 9 The student should be able to give a detailed description of the subject using theoretical fundamentals and specific examples.

PLO 10 The student should understand and be able to use mathematical formulae related to the subject.

PLO 11 The student should be able to read, understand and prepare sketches, simple drawings and schematics describing the subject.

PLO 12 The student should be able to apply his knowledge in a practical manner using manufacturer's instructions.

PLO 13 The student should be able to interpret results from various sources and measurements and apply corrective action where appropriate.

Aeronautical Engineering Technology

PLO 1 An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities

PLO 2 An ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies

PLO 3 An ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes

PLO 4 An ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives

PLO 5 An ability to function effectively as a member or leader on a technical team

PLO 6 An ability to identify, analyze, and solve broadly-defined engineering technology problems

PLO 7 An ability to apply written, oral, and graphical communication in both technical and nontechnical environments; and an ability to identify and use appropriate technical literature

PLO 8 An understanding of the need for and an ability to engage in self-directed continuing professional development

PLO 9 An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity

PLO 10 A knowledge of the impact of engineering technology solutions in a societal and global context

PLO 11 A commitment to quality, timeliness, and continuous improvement

PLO 12 Application of concepts to the analysis, development, implementation, or oversight of aeronautical/aerospace systems and processes

PLO 13 Technical expertise in engineering materials, statics, strength of materials, applied aerodynamics, applied propulsion, and either electrical power or electronics

PLO 14 Technical expertise having added depth in a minimum of three subject areas chosen from: manufacturing processes, vehicle design and modification, engineering materials, electro-mechanical devices and controls, industrial operations, and systems engineering including the appreciation of the engineering design cycle and the system life cycle relating to the manufacture and maintenance of aeronautical/aerospace vehicles and their components

PLO 15 Expertise in applied physics having an emphasis in applied mechanics, plus added technical topics in physics and other science principles appropriate to the program objectives

Chemical Engineering Technology

PLO 1 An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities

PLO 2 An ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies

PLO 3 An ability to conduct standard tests and measurements to conduct, analyse, and interpret experiments and to apply experimental results to improve processes

PLO 4 An ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to programme educational objectives

PLO 5 An ability to function effectively as a member or leader on a technical team

PLO 6 An ability to identify, analyse, and solve broadly- defined engineering technology problems

PLO 7 An ability to apply written, oral, and graphical communication in both technical and nontechnical environments and an ability to identify and use appropriate technical literature

PLO 8 An understanding of the need for and an ability to engage in self-directed continuing professional development

PLO 9 An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity

PLO 10 A knowledge of the impact of engineering technology solutions in a societal and global context

PLO 11 A commitment to quality, timeliness, and continuous improvement

PLO 12 The application of chemistry in industrial setting

PLO 13 Ability to solve technical problems by the industrial application of inorganic chemistry, organic chemistry, analytical chemistry, physics and process stoichiometry

PLO 14 Possess a deeper and broader knowledge which enables them to solve technical and managerial problems of a more complex nature (i.e. for the Bachelor degree)

PLO 15 Knowledge of the concepts of chemical engineering unit operations such as mass transfer, heat transfer, distillation, and evaporation to the design, operation, and maintenance of chemical processes

PLO 16 Knowledge of the principles of thermodynamics; process control and instrumentation, computer applications, and materials science to the design, operation, and maintenance of chemical processes

Civil Engineering Technology

PLO 1 An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities

PLO 2 An ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies

PLO 3 An ability to conduct standard tests and measurements to conduct, analyse, and interpret experiments and to apply experimental results to improve processes

PLO 4 An ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to programme educational objectives

PLO 5 An ability to function effectively as a member or leader on a technical team

PLO 6 An ability to identify, analyse, and solve broadly-defined engineering technology problems

PLO 7 An ability to apply written, oral, and graphical communication in both technical and nontechnical environments and an ability to identify and use appropriate technical literature

PLO 8 An understanding of the need for and an ability to engage in self-directed continuing professional development

PLO 9 An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity

PLO 10 A knowledge of the impact of engineering technology solutions in a societal and global context

PLO 11 A commitment to quality, timeliness, and continuous improvement

PLO 12 Utilise principles, hardware, and software that are appropriate to produce drawings, reports, quantity estimates, and other documents related to civil engineering

PLO 13 Conduct standardized field and laboratory tests related to civil engineering

PLO 14 Utilise surveying methods appropriate for land measurement and/or construction layout

PLO 15 Apply fundamental computational methods and elementary analytical techniques in sub-disciplines related to civil engineering

PLO 16 Plan and prepare documents appropriate for design and construction

PLO 17 Perform economic analyses and cost estimates related to design, construction, operations and maintenance of systems associate with civil engineering

PLO 18 Select appropriate engineering materials and practices

PLO 19 Perform standard analysis and design in at least three sub-disciplines related to civil engineering

Electrical Engineering Technology

PLO 1 An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities

PLO 2 An ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies

PLO 3 An ability to conduct standard tests and measurements; to conduct, analyse, and interpret experiments; and to apply experimental results to improve processes

PLO 4 An ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to programme educational objectives

PLO 5 An ability to function effectively as a member or leader on a technical team

PLO 6 An ability to identify, analyse, and solve broadly-defined engineering technology problems

PLO 7 An ability to apply written, oral, and graphical communication in both technical and nontechnical environments; and an ability to identify and use appropriate technical literature

PLO 8 An understanding of the need for and an ability to engage in self-directed continuing professional development

PLO 9 An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity

PLO 10 A knowledge of the impact of engineering technology solutions in a societal and global context

PLO 11 A commitment to quality, timeliness, and continuous improvement

PLO 12 The application of circuit analysis and design, computer programming, associated software, analog and digital electronics, microcomputers, and engineering standards to the building, testing, operation, and maintenance of electrical systems

PLO 13 The applications of physics or chemistry to electronic circuits in a rigorous mathematical environment at or above the level of algebra and trigonometry

PLO 14 The ability to analyse, design, and implement control systems, instrumentation systems, communications systems, computer systems, or power systems

PLO 15 The ability to apply project management techniques to electrical systems

PLO 16 The ability to utilise statistics/probability, transform methods, discrete mathematics, or applied differential equations in support of electrical systems

Electronic Engineering Technology

PLO 1 An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities

PLO 2 An ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies

PLO 3 An ability to conduct standard tests and measurements; to conduct, analyse, and interpret experiments; and to apply experimental results to improve processes

PLO 4 An ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to programme educational objectives

PLO 5 An ability to function effectively as a member or leader on a technical team

PLO 6 An ability to identify, analyse, and solve broadly-defined engineering technology problems

PLO 7 An ability to apply written, oral, and

graphical communication in both technical and nontechnical environments; and an ability to identify and use appropriate technical literature

PLO 8 An understanding of the need for and an ability to engage in self-directed continuing professional development

PLO 9 An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity

PLO 10 A knowledge of the impact of engineering technology solutions in a societal and global context

PLO 11 A commitment to quality, timeliness, and continuous improvement

PLO 12 The application of circuit analysis and design, computer programming, associated software, analog and digital electronics, microcomputers, and engineering standards to the building, testing, operation, and maintenance of electronic systems

PLO 13 The applications of physics or chemistry to electronic circuits in a rigorous mathematical environment at or above the level of algebra and trigonometry

PLO 14 The ability to analyse, design, and implement control systems, instrumentation systems, communications systems, computer systems, or power systems

PLO 15 The ability to apply project management techniques to electronic systems

PLO 16 The ability to utilise statistics/probability, transform methods, discrete mathematics, or applied differential equations in support of electronic systems

Engineering Logistics Management

PLO 1 An ability to apply the knowledge, techniques, skills, and modern tools of the discipline to engineering logistics technology

PLO 2 An ability to apply knowledge of engineering, management and technology to engineering logistics related issues.

PLO 3 An ability to identify analyse and solve engineering logistics related issues;

PLO 4 An ability to identify, analyse, and solve narrowly defined engineering logistics technology problems;

PLO 5 An ability to apply written, oral, and graphical communication in both technical and nontechnical environments; and an ability to identify and use appropriate technical and management literature;

PLO 6 An understanding of the need for and an ability to engage in self-directed continuing professional development;

PLO 7 An understanding of and a commitment to address professional and ethical responsibilities, including a respect for diversity;

PLO 8 A commitment to quality, timeliness, and continuous improvement.

Mechanical Engineering Technology

PLO 1 An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities

PLO 2 An ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies

PLO 3 An ability to conduct standard tests and measurements to conduct, analyse, and interpret experiments and to apply experimental results to improve processes

PLO 4 An ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to programme educational objectives

PLO 5 An ability to function effectively as a member or leader on a technical team

PLO 6 An ability to identify, analyse, and solve broadly-defined engineering technology problems

PLO 7 An ability to apply written, oral, and graphical communication in both technical and nontechnical environments and an ability to identify and use appropriate technical literature

PLO 8 An understanding of the need for and an ability to engage in self-directed continuing professional development

PLO 9 An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity

PLO 10 A knowledge of the impact of engineering technology solutions in a societal and global context

PLO 11 A commitment to quality, timeliness, and continuous improvement

PLO 12 The design, installation, manufacturing, testing, evaluation, technical sales, or

maintenance of mechanical systems

PLO 13 The analysis, applied design, development, implementation, or oversight of advanced mechanical systems and processes

PLO 14 The ability to apply specific programme principles to the analysis, design, development implementation of advance mechanical systems or processes

PLO 15 The ability to apply project management techniques to analyse, design and implement advance mechanical systems

PLO 16 The ability to utilise statistics/probability and applied differential equations in support of mechanical systems and processes

Mechatronic Engineering Technology

PLO 1 An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to mechatronic engineering technology activities

PLO 2 An ability to select and apply a knowledge of mathematics, science, engineering, and technology to mechatronic engineering technology problems that require the application of principles and applied procedures or methodologies

PLO 3 An ability to conduct standard tests and measurements to conduct, analyse, and interpret experiments and to apply experimental results to improve processes

PLO 4 An ability to design systems, components, or processes for mechatronic engineering technology problems appropriate to programme educational objectives

PLO 5 An ability to function effectively as a member or leader on a technical team

PLO 6 An ability to identify, analyse, and solve mechatronic engineering technology problems

PLO 7 An ability to apply written, oral, and graphical communication in both technical and nontechnical environments and an ability to identify and use appropriate technical literature

PLO 8 An understanding of the need for and an ability to engage in self-directed continuing professional development

PLO 9 An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity

PLO 10 A knowledge of the impact of engineering technology solutions in a societal and global context

PLO 11 A commitment to quality, timeliness, and continuous improvement

Petroleum Engineering Technology

PLO 1 An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to petroleum engineering technology activities

PLO 2 An ability to select and apply a knowledge of mathematics, science, engineering, and technology to petroleum engineering technology problems that require the application of principles and applied procedures or methodologies

PLO 3 An ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes

PLO 4 An ability to design systems, components, or processes for petroleum engineering technology problems appropriate to program educational objectives

PLO 5 An ability to function effectively as a member or leader on a technical team

PLO 6 An ability to identify, analyze, and solve petroleum engineering technology problems

PLO 7 An ability to apply written, oral, and graphical communication in both technical and nontechnical environments; and an ability to identify and use appropriate technical literature

PLO 8 An understanding of the need for and an ability to engage in self-directed continuing professional development

PLO 9 An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity

PLO 10 A knowledge of the impact of engineering technology solutions in a societal and global context

PLO 11 A commitment to quality, timeliness, and continuous improvement

Health Sciences

Emergency Medical Services

PLO 1 Provide competent clinical pre-hospital care to the ill or injured;

PLO 2 Master skills and concepts essential to the operation of EMS systems and other agencies;

PLO 3 Interact effectively with health-care professional teams and patients;

PLO 4 Link theoretical and practical experience and knowledge of health care with specific application to EMS;

PLO 5 Establish the foundation for advanced and graduate-level studies and qualifications;

PLO 6 Possess the basis of management and leadership skills to contribute to the planning and effectiveness of UAE Emergency Medical Systems

PLO 7 Provide culturally competent care to all clients/patients in the United Arab Emirates.

Health Information Management

PLO 1 Apply principles of organisation and management in order to develop effective skills in leadership, motivation, and team-building techniques for effective supervision of health information management staff.

PLO 2 Accurately assign diagnostic and procedural codes and use the appropriate classification systems to in a timely manner whilst maintaining the completeness and accuracy of data.

PLO 3 Perform and participate in health information analysis tasks such as abstracting data and calculating, interpreting, and presenting statistics and other data.

PLO 4 Develop, implement and manage health information policies and procedures to ensure compliance with Ministry of Health, local health authorities and accreditation agency requirements.

PLO 5 Evaluate, implement and manage both paper-based and computer-based health information systems.

PLO 6 Apply principles of legal and ethical behavior as they relate to issues applicable to legal aspects of health information.

PLO 7 Interpret and apply rules for security, confidentiality, retention, integrity, and access of health information.

Medical Imaging

PLO 1 Provide competent and knowledgeable patient care in advanced imaging procedures based on best international practices.

PLO 2 Apply principles and theories of operation to competently use digital imaging and information technology equipment.

PLO 3 Solve practical problems in medical imaging by applying skills in critical thinking, problem solving, communication, numeracy, and computer literacy

PLO 4 Enhance human interaction and performance in the clinical environment by integrating liberal education principles.

PLO 5 Apply knowledge and implementation of effective radiation protection programs as required.

PLO 6 Apply principles related to management, organisational behaviour, and supervision in a medical imaging environment.

PLO 7 Apply research skills to the investigation of problems in medical imaging and to the assessment and evaluation of instrumentation and procedures in radiology.

PLO 8 Plan for lifelong learning by continuously updating skills and knowledge.

PLO 9 Apply clinical imaging protocols to undertake general and specialized medical imaging procedures

PLO 10 Evaluate quality performance characteristics related to medical imaging equipment.

Medical Laboratory Science

PLO 1 Integrate knowledge from the humanities, social sciences, natural science and medical laboratory science to demonstrate professional medical laboratory science practice.

PLO 2 Collaborate and integrate with members of the healthcare team to facilitate caring behaviors to meet the needs of patients in different health care settings and delivery practices.

PLO 3 Demonstrate technical competency in the delivery of quality laboratory service in all areas in the scope of medical laboratory practice.

PLO 4 Display a commitment to the role and the development of the medical laboratory professional.

PLO 5 Apply principles related to management, organisational behaviour, and supervision in the medical laboratory professional environment.

PLO 6 Apply research skills to the investigation of problems in medical laboratory science and to the assessment and evaluation of quality procedures in medical laboratory science.

PLO 7 Evaluate quality performance characteristics relative to the operation of the medical

laboratory science lab, and utilize a recognized quality process to ensure high standards in the laboratory setting.

Nursing

PLO 1 Practice professional nursing within a values based philosophy, utilizing a variety of nursing models.

PLO 2 Formulate and follow an ethical framework to guide conduct and decision making in professional nursing.

PLO 3 Demonstrate the use of critical thinking in professional nursing practice

PLO 4 Utilize a scholarly framework to evaluate, apply, and communicate research findings to develop professional nursing practice

PLO 5 Analyse and evaluate leadership and management theories and practice in health care.

PLO 6 Engage in collaborative practice with other professions providing health care.

PLO 7 Provide care applying practices of culturally competent care.

PLO 8 Evaluate the health policy process for the improvement of health care for all.

PLO 9 Understand essential abilities related to entrepreneurship and sustainability in relation to professional practice opportunities.

PLO 10 Demonstrate a commitment to personal and professional development and community service through continuing education, participation in professional organisations, and community service opportunities.

Pharmacy

PLO 1 Demonstrate competency in using knowledge and skills to meet patient's drug-related needs, with the objective of achieving optimal patient outcomes and maintaining or improving the patient's quality of life

PLO 2 Apply the concepts of natural, biological, pharmaceutical and medical sciences to problem solving in pharmacy practice and therapeutic decision making.

PLO 3 Communicate and effectively counsel patients and allied healthcare professionals individually and in groups to support safe and optimal patient care in diverse settings or situations.

PLO 4 Assume ethical, legal and professional responsibilities when practicing in a variety of professional pharmaceutical care settings.

PLO 5 Demonstrate competencies in compounding, manufacturing, testing and in the accurate supply and distribution of quality pharmaceuticals to meet patient care requirements.

PLO 6 Contribute with constructive input to quality practice management issues of pharmacy administration, pharmacy legislations and pharmaco-economics with the use of practice resources.

PLO 7 Identify and critically evaluate current pharmaceutical and medical literature for accuracy and suitability for enquiry to address pharmacy practice.

Social Work

PLO 1 Demonstrate the knowledge and skills a social worker needs in order to work effectively with individuals, groups, families, organisations and communities.

PLO 2 Recognize and support ways social workers can interact effectively with diverse, multicultural aspects of UAE populations.

PLO 3 Understand and apply values and ethical standards of the social work profession.

PLO 4 Evaluate and apply research and knowledge to social work practice interventions.

PLO 5 Cultivate an awareness of ways that effective social work practices can help advance human rights and social justice in the global context.

PLO 6 Utilize cognitive processes of critical thinking, self-reflection, and commitment to lifelong learning to inform and communicate social work practice.

Foundations

PLO 1 Reading: Read independently employing a range of reading strategies. Read a broad range of articles, reports, and introductory academic texts, being able to extract important specific details and understand overall global meaning, demonstrating comprehension in a variety of ways.

PLO 2 Writing: Write clear, detailed texts on a broad range of topics, demonstrating a solid command of an intermediate level of grammar and a broad range of vocabulary. Formulate arguments in a coherent way and demonstrate an awareness of text organisation.

Demonstrate an ability to review and self-edit.

PLO 3 Listening: Demonstrate an ability to understand extended speech typical of academic lectures on a range of general topics and typical news programs at natural speeds and to extract gist and detail.

PLO 4 Speaking: Demonstrate an ability to interact fluently with native speakers, taking an active part in discussions. Present clear detailed descriptions and explanations on a wide range of subjects.

PLO 5 Grammar: Demonstrate a solid understanding of grammar at the intermediate level as defined by the Foundations Level 4 Curriculum, and demonstrate full command of punctuation and capitalization.

PLO 6 Vocabulary: Demonstrate understanding of all words on the Curriculum Vocabulary List, including an understanding of the multiple meanings of a broad range of words.

PLO 7 Study Skills: Demonstrate a range of good study skills and behaviors: punctuality, participation in class activities, timely completion of homework and assignments, ability to schedule and complete independent study and review, organisation as regards materials and equipment, and the use of English as the medium of communication in class.

PLO 8 ICT: Effectively use the iPad to learn and practice English, to access course materials, and to participate in course activities. Use the internet to search for information. Use the keyboard effectively to write. Effectively use shared folders in the cloud.

PLO 9 Understand and apply the mathematical concepts of: (1) Ratio, Proportion & Percentages, (2) Basic Geometry, (3) Measurement and Data Analysis, (4) Real Numbers, (5) Simple Linear Equations, (6) Exponents and Polynomials

General Studies

PLO 1 Communicate effectively orally and in writing and deploy a range of presentation and information retrieval techniques within both learning and workplace settings

PLO 2 Recognize artistic expressions and scientific methods and their impact in the modern world through analysis and reflection on practical experience

PLO 3 Demonstrate the ability to work effectively in teams and take on leadership roles

PLO 4 Recognize, examine and compare relationships and sequences within international diverse cultures and seemingly random social and historical events

PLO 5 Use effectively information technology techniques in work environment

PLO 6 Reflect on the attitudes and beliefs relevant to individual and social choices and actions

PLO 7 Demonstrate a knowledge of mathematics and its application in various contexts

APPENDIX

Course Descriptions

AES 1003 - EMIRATI STUDIES
Fostering citizenship through introducing the students to the major social aspects of UAE societal values and heritage, offering studies in a variety of important fields related to the UAE: history; geography; internal and external political aspects; social development and services provided by the UAE; empowerment of women; the UAE's approach to a knowledge-based community; multiculturalism; developments in infrastructure, economy and technology; and the UAE's position on global competitiveness. Presents future visions to enable students to develop strategic plans and explore the challenges this presents.
CREDITS: 3.00

AES 1013 - ARABIC COMMUNICATIONS I
Enhancing proficiency and skills in the Arabic language by developing solid knowledge and competencies in both productive (speaking/writing) and receptive skills (reading/ listening) are fundamental for graduates. The course adopts an integrated approach with an emphasis on current professional use of Arabic by engaging with standard, modern, and integrated topics to enhance knowledge and communication skills.
CREDITS: 3.00

AES 3003 - PROFESSIONAL ARABIC
Enhancing professional Arabic skills for the workplace, focusing on the needs of management professionals in a cross-cultural environment, while improving communication skills effectively in both oral and written media as applied in workplace related situations.
CREDITS: 3.00

AET 2111 - FLUID DYNAMICS
Introducing basic concepts of fluid mechanics including fluid properties, hydrostatics, basic fluid flow, continuity and momentum equations, energy equations, laminar and turbulent flow and pressure losses. The course practical work will reinforce the theory through a set of experiments in the fluid dynamics laboratory.
CREDITS: 3.00

AET 2112 - ELECTRIC FUNDAMENTALS I DC (MOD 3, B1)
Meeting requirements of CAR 66 Module 3 as defined by the GCAA. Introducing the concepts of direct current theory and application, and providing knowledge of electrical fundamentals of DC circuits and characteristics. Understanding the production and utilisation of electrical power in the aviation industry .
CREDITS: 3.00

AET 2113 - ELECTRONIC FUNDAMENTALS (MOD 4, B1)
Meeting requirements of CAR 66 Module 4 as defined by the GCAA. Covering semiconductor devices and their characteristics with application in aircraft electronics and navigation systems including servomechanisms used in aircraft systems.
CREDITS: 3.00

AET 2114 - AIRCRAFT MATERIALS
Understanding of material properties and behaviour and how that influences basic structural behaviour and structural design. Explaining material properties and how to change the properties. Introducing concepts such as stresses and strain in tensile, shear or bending and how to apply them in basic structural elements. Description of typical fuselage and wing structures, and the limitation this imposes on material selection, is covered.
CREDITS: 3.00

AET 2211 - FUNDAMENTALS OF FLIGHT
INTRODUCING basic aspects of atmospheric flight with efficiency concepts. Covering concepts on the aerodynamic characteristics of airplanes and the engine performance, as well as how the geometric shape of the airplane influences these properties.
CREDITS: 3.00

AET 2212 - ELECTRIC FUNDAMENTALS II AC (MOD 3, B1)
Meeting requirements of CAR 66 Module 3 as defined by the GCAA. Introducing the concepts of alternating current (AC) theory and application and providing knowledge of electrical fundamentals of AC circuits and characteristics. Applications of AC systems in aircrafts are covered.
CREDITS: 3.00

AET 2213 - AERODYNAMICS I
Develops an understanding of low-speed aerodynamics with an introduction to compressible flows. Presents

basic concepts such as aerodynamic forces, moments, coefficients and introduces relevant fundamental principles and equations in aerodynamics. Flow over airfoils and over finite wings is studied in detail.
CREDITS: 3.00

AET 2214 - Engineering Mechanics
Foundation of mechanics for aerospace engineering based on Newtonian mechanics and laws of conservation of energy. Description of dynamics with analysis of the movement of particles and rigid bodies (kinematics) and the relations between kinematics and kinetics (mass and forces). The fundamental concepts of stress, strain and deformation of torque-transmitting shafts are introduced.
CREDITS: 3.00

AET 3111 - Aero Engineering Thermodynamics
Applied thermodynamics to actual and perfect gases and vapours; energy concepts, processes, and applications. Application of thermodynamic principles to fluid flow, power cycles, and refrigeration is also covered.
CREDITS: 3.00

AET 3112 - Applied Engineering Mechanics
Applying knowledge of the elements and parts that are used in aeronautical machines. Deals with forces, reactions and the resultant stresses, influence of shape, linkages and their resultant motions and power transmission systems. Develops understanding of reciprocating and rotary mechanism, fastenings, shafts and couplings, clutches, bearings, flywheels, belt and chain drives, gearing and gear trains.
CREDITS: 3.00

AET 3113 - Airframe Structures
Describing various types of structures used in small, medium and large aircrafts. Development of conceptual analysis of simple astatically loaded trusses and joints to show the different forces acting on aircraft structures. Understanding the effect of certain structures on load distribution and the interaction of forces.
CREDITS: 3.00

AET 4003 - Aeronautical Project I
Team formation to propose, design, and plan an engineering project. Though mentored by a faculty member, the team is evaluated on its ability to coordinate efforts to propose the project design criteria, major components, resources, systematic design, implementation schedule, and estimated cost.
CREDITS: 3.00

AET 4023 - Aeronautical Project II
Implementation, evaluation, and analysis of a capstone engineering project. Though guided by faculty, the student team is primarily responsible for the completion of the project milestones and course objectives. The course requires the integration and application of technological, organisational, communication, and interpersonal skills by the student team. Safe implementation, documentation, and presentation skills form the basis for assessment.
CREDITS: 3.00

AET 4111 - Energy and Propulsion
Introducing turbomachine-powered propulsion devices and airbreathing propulsion concepts. Focuses on jet propulsion and turbomachinery, aero- and thermodynamic terminology and equations relevant for these machines. The principles of various propulsion concepts and their impact on energy usage and consequently the environmental impact are treated.
CREDITS: 3.00

AET 4211 - Computer-Aided Analysis for Aero-Mechanical Design
Developing basic theory used in CFD methods in the design of airborne vehicles. The labs are performed in cooperation with guest lectures to give insight into industrial applications of CFD. Of particular interest is the interaction between aerodynamics and design of aircraft.
CREDITS: 3.00

AET 4212 - Aviation Legislation
Introduces and describes aviation legislation that is essential for engineers in the field of aircraft maintenance as required by GCAA CAR 66 Module 10 B1.1. Topics covered include: regulatory framework; certifying staff; approved maintenance organisations; commercial and private air transportation; aircraft certification; CAR M and applicable national and international requirements.
CREDITS: 3.00

AET 4311 - Aircraft Structures Analysis
Covers topics on principles of stressed skin construction: structural components of aircraft; loads on structural components; function of structural components; fabrication of structural components and connections; airworthiness and airframe loads; bending, shear, and torsion of open and closed thin-walled beams; structural idealisation; stress analysis of aircraft components; structural and loading discontinuities; and introduction to aeroelasticity.
CREDITS: 3.00

AET 4321 - AIRCRAFT DESIGN

Introducing topics on conceptual design of a modern airplane to satisfy a given set of requirements: estimation of size; selection of configuration, weight and balance, and performance of airplane, sizing of cockpit, passengers' cabin, cargo compartment, and weapon carriage considerations and conic shape lofting of fuselage and wings for design layout.
CREDITS: 3.00

AET 4331 - COMPOSITE MATERIALS FOR AEROSPACE APPLICATIONS

Covers topics on application of composite materials in the aerospace industry: fibre reinforced composites; stress, strain, and strength of composite laminate; failure criterion; environmental effect; and design of composite structure.
CREDITS: 3.00

AET 4341 - CONTROL SYSTEMS

Introducing topics on study of continuous-time systems, classical and modern system design methods, transfer function models, state space, dynamics of linear systems, and frequency domain analysis and design techniques and introduction of controllability and observability, and full-state pole placement controller design.
CREDITS: 3.00

AET 4351 - AIRCRAFT RELIABILITY AND MAINTENANCE ENGINEERING

Developing concepts on reliability theory, life testing, maintained systems, integrated logistic support (ILS), aircraft handling, repair station requirements, quality systems, inventory control, structural repair, engine maintenance and overhaul, maintenance of aircraft systems and instruments.
CREDITS: 3.00

AET 4361 - AVIATION MANAGEMENT

Provides an overview of airline economics and the structure of the air transportation industry. Developing detailed understanding of airport operations management with emphasis on environmental issues.
CREDITS: 3.00

AET 4371 - CREW RESOURCE MANAGEMENT AND HUMAN FACTORS

Understanding of the non-technical skills applicable to working in a multi-crew environment. Introducing human factors contributing to crew resource management in various settings and environments, including skills required of a pilot.
CREDITS: 3.00

AET 4381 - ROCKET SCIENCE

Describes fundamental aspects of spaceflight dynamics. Two main topics are embraced: rocket dynamics and orbital mechanics, respectively. Emphasis is placed on conceptual understanding of the fundamentals. Theoretical aspects of this course are translated to challenging tasks in project work.
CREDITS: 3.00

AET 4391 - COMPUTATIONAL AERODYNAMICS

Introduces simplifications to the Navier-Stokes equations for steady, attached flows, integral formulation of potential flow equations for subsonic flows, potential flow solutions with panel methods, gradient based design optimisation, inverse airfoil design using a panel code, full potential flow equation, Transonic Small Disturbance (TSD) equation, characteristic lines, numerical solution of the TSD equation using Finite Difference methods, analysis of transonic flows past airfoils and numerical solution of the Full Potential flow Equation (FPE).
CREDITS: 3.00

AHA 1403 - ELECTRONIC FUNDAMENTALS (MOD 4 B1)

Covers electronic fundamentals and circuits including diodes, transistors, integrated circuits, printed circuit boards and syncho and servo mechanisms used in aircraft systems. Students will also complete practical's in electronic circuits using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 3.00

AHA 1504 - DIGITAL TECHNIQUES/ ELECTRONIC INSTRUMENT SYSTEMS (MOD 5 B1)

Provides the theoretical and practical knowledge of the fundamental concepts of digital electronics technology with basic principles of components, circuits, and techniques used in digital computers and electronic instrument systems. This course meets the requirements of GCAA CAR 66 Module 5B1.
CREDITS: 4.00

AHA 1614 - MATERIALS AND HARDWARE

Understanding of material properties and behaviour and how that influences basic structural behaviour and structural design. Provides understanding of the reason of the way certain material properties behave and how to change the properties. Covering concepts on stresses and strain in tensile, shear or bending with applications in basic structural elements.
CREDITS: 14.00

AHA 2511 - GAS TURBINE ENGINE (MOD 15 B1)

Introduces and applies gas turbine engine concepts

and designs that are essential for engineers in the field of aircraft maintenance. Topics covered include: fundamentals; engine parts functional breakdown; engine designs, APU, protection and indication, and storage and preservation. Students will also complete aircraft maintenance on aircraft gas turbine engines using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 11.00

AHA 2704 - Propeller

Introduces and applies propeller concepts that are essential for engineers in the field of aircraft maintenance. Topics covered include: fundamentals; construction; pitch control; synchronising; ice protection; and propeller maintenance, storage and preservation. Students will also complete aircraft maintenance on aircraft propellers using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 4.00

AHA 2715 - Maintenance Practices (Mod 7 B1)

Introduces and applies maintenance practices that are essential for Engineers in the field of aircraft maintenance. Topics covered include; safety precautions, workshop practices, tools, test equipment, fits and clearances, electrical connectors, riveting, maintenance procedures and material handling. Students will also complete aircraft maintenance in mechanical workshops/hangars using a range of tools and in accordance with relevant aircraft manuals.
CREDITS: 15.00

AHA 3140 - Turbine Aeroplane Aerodynamics, Structures and Systems (Mod 11A) (B1.1) *1 yr course

Provides information on civil aircraft systems and designs for engineers in the field of aircraft maintenance. Turbine aeroplane systems covers the range of airframe, electrical and avionic topics that support understanding of modern aircraft systems. Students will also complete aircraft maintenance on aircraft systems using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 40.00

AHM 1103 - Aviation Mathematics

Aviation technology is governed by the laws of physics. All aircraft systems obey the laws of physics, and therefore must obey the laws of mathematics which relate to physics. In order to design and build aircraft and aircraft systems, as well as maintain those systems, engineers need to have a good foundation in mathematics. This course introduces and applies mathematical concepts that are essential for engineers in the field of aircraft maintenance. Topics covered include arithmetic, algebra and geometry.
CREDITS: 3.00

AHM 1203- Aviation Physics

The principles of physics support explanation on how an aircraft behaves in relation to using physics principles/laws. Physics laws affect all aircraft maintenance designs, and maintenance engineers use fundamental principles of physics relevant to aviation technology. Topics covered include: matter; statics; kinetics; dynamics; fluid dynamics; thermodynamics; optics; wave motion; and sound.
CREDITS: 3.00

AHM 1309 - Electrical Fundamentals (Mod 3 B1 and B2)

The principles of electrical fundamentals are applied on nearly all commercial and military aircraft. Aircraft these days are increasingly using electrical motors, actuators and generators to move, control and provide power to aircraft systems. Electrical fundamentals are introduced in three main areas: DC fundamentals; AC fundamentals; and Motors and Generators. Students will also construct, operate and test DC and AC circuits using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 9.00

AHM 1803 - Basic Aerodynamics (Mod 8 B1 and B2)

Aerodynamics is the study of objects moving through the air. In effect, aerodynamics is concerned with the aircraft, the relative wind and the atmosphere. Basic aerodynamics supports understanding of aircraft systems for courses taught later in the academic programme. Students will also complete practical using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 3.00

AHM 2005 - Aviation Legislation (Mod 10B1 and B2)

Introduces and describes aviation legislation that is essential for engineers in the field of aircraft maintenance. Topics covered include: regulatory framework; certifying staff; approved maintenance organisations; commercial air transportation; aircraft certification; continuing airworthiness,and applicable national and international requirements.
CREDITS: 5.00

AHM 2903 - Human Factors (Mod 9 B1 and B2)

Introduces human factors principles that are essential for engineers in the field of aircraft maintenance. Topics

covered include: human performance and limitations; social psychology; factors affecting performance; physical environment; communication; human error; and hazards in the workplace.
CREDITS: 4.00

AHM 3004 - Work Placement (10 Weeks)

Integration of student learning into a working environment develops real-world skills and knowledge. Relevant aviation engineering experience in an actual working environment also provides students with opportunity to develop and apply professional work practices in an ethical manner. The work placement involves a real-world environment with an employer to support development and application of knowledge. The documentation of objective evidence of engineering skills learned at HCT to the workplace is a major feature of this course.
CREDITS: 4.00

AHV 1409 - Electronic Fundamentals

Modern aircraft use electronics in all systems within the cockpit, engine and aircraft cabin environment. The fundamentals of electronics details circuits including diodes, transistors, integrated circuits, printed circuit boards and syncho and servo mechanisms. Students will define, describe and analyse aircraft electronic circuits in amplifiers, regulation and control/actuation. Students will also complete apractical using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 9.00

AHV 1509 - Digital Techniques Electronic Instrument Systems

Modern aircraft use electronics in all systems within the cockpit, engine and aircraft cabin environment. The fundamentals of electronics details circuits including diodes, transistors, integrated circuits, printed circuit boards and syncho and servo mechanisms. Students will define, describe and analyse aircraft electronic circuits in amplifiers, regulation and control/actuation. Students will also complete a practical using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 9.00

AHV 2610 - Materials and Hardware

Understanding of material properties and behaviour and how these influence basic structural behaviour and structural design. Provides understanding of the reason of certain material properties and how to change the properties. Covering concepts on stresses and strain in tensile, shear or bending with applications in basic structural elements.
CREDITS: 10.00

AHV 2715 - Maintenance Practices

Describes maintenance practices in a theoretical and practical familiarisation that are essential for engineers in the field of aircraft maintenance. Topics covered include: safety precautions; workshop practices; tools; test equipment; fits and clearances; electrical connectors; riveting; maintenance procedures; and material handling. Students will also complete aircraft maintenance in mechanical/aircraft workshops using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 15.00

AHV 3342 - Aircraft Aerodynamics, Structures and Systems (Mod 13 B2)

Understanding of aircraft/avionic systems is information on civil aircraft systems for engineers in the field of aircraft maintenance. Aircraft aerodynamics/systems analyse a range of electrical, instrument, com/nav and miscellaneous avionics aircraft systems. Students will also complete aircraft maintenance on aircraft systems using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 42.00

AHV 3405 - Propulsion

Operation and indication of the electronics are critical to modern gas turbine engines. The gas turbine engine concepts and develops theoretical and practical knowledge relating to engine parameter monitoring that is essential for avionics engineers in the field of aircraft maintenance. Topics covered include: basic turbine engine construction and operation; turbine engine indication systems; engine control systems; FADEC and engine built in test equipment (BITE). Students will also completea practical using a range of tools, in accordance with relevant aircraft manuals.
CREDITS: 5.00

BUS 1003 - Management and Leadership

Gain an understanding of the concepts of leadership and management as understood by practising managers and behavioural scientists. Learn the basic functions of management, management levels and skills, model of communication, individual and group decision making, role of leaders in managing change, leadership theory, concepts and practical issues related to both the UAE and the wider business environment.
CREDITS: 3.00

BUS 1103 - Economics for Managers

Introduces the basic concepts of Microeconomics with an emphasis on their application in business decisions and market structures. Focuses on the mechanism

of demand and supply, price elasticity of demand, costs of production and the basic characteristics of market structures. Students understand how to use the theoretical concepts and apply them to UAE businesses and industries.
CREDITS: 3.00

BUS 1203 - Software Applications for Business
Develops an understanding of computer terminology, hardware, software, operating systems, and information systems relating to the business environment. Focuses on business applications of software for personal and organisational productivity, including word processing, spreadsheets, presentations, graphics and business-oriented utilisations of internet and mobile communications technology. Outlines integrated software packages used in the workplace and how to use computers to communicate and solve management problems in contemporary business environments.
CREDITS: 3.00

BUS 1303 - Marketing
Introduces the basic concepts of marketing. Develops an understanding of the overall process of marketing including the research, planning, implementation and control of marketing activities in the contemporary business environment. The main emphasis is on the practical application of marketing concepts covered in the course, using UAE consumer products as examples.
CREDITS: 3.00

BUS 1403 - Business Ethics and Corporate Governance
Introduction to business ethics, codes of conduct and ethical dilemmas. Develops the importance of critical assessment of situations that are ethically ambiguous or contain ethical dilemmas. Introduces corporate social responsibility (CSR) and governance from local and international perspectives, as they relate to business and politics, industrial pollution, environmental policy, and institutional investor participation. Ethical administration and moral responsibility of corporations are studied.
CREDITS: 3.00

BUS 1503 - Accounting for Managers
Introduction to accounting as the language of business. Understand the terminology, accounting principles, the fundamentals of double entry, the accounting process from journals to financial statements, and how financial statements communicate information about performance and position to users external to the business. Included also is an introduction to managerial accounting with ratio analysis, cost classification, Cost Volume Profit Analysis (CVP) and Operating Budgets.
CREDITS: 3.00

BUS 2003 - Business and Commercial Law
Provides an insight into the fundamental principles of law including contract and tort and the foundations of UAE law including the Civil Code and the Judicial System. Focuses on the business aspects of law including an introduction to company formation; financial control and workplace issues. Develops an understanding of how law may control business operations and the procedures for resolving conflict and seeking appropriate redress.
CREDITS: 3.00

BUS 2103 - Operations Management
Provides a detailed study of the management of an organisation's chain of value adding activities, from procurement of resources and transformation into manufactured goods and service outputs, through distribution to customers. Includes operations strategy and the various tools and techniques of operations management; quality, work, product and service design, process selection and facilities layout, capacity and location planning and related issues and models.
CREDITS: 3.00

BUS 2203 - Business Statistics for Managers
Develops student's ability to assess and critically interpret statistics and business information and apply them in changing business environments. Develops a clear theoretical understanding of various analytical tools including descriptive statistics; probability; hypothesis testing and correlation and regression analysis; and an appreciation of the application of analytical tools to business decision contexts. These skills and competencies provide a foundation for professional practice and further study in the major's degree.
CREDITS: 3.00

BUS 2303 - Financial Management
Provides an overview of the basics of financial management for financial decision making. Covers the fundamentals of financial management to support both short and long-term financial decisions of the firm. Includes topics related to sources of short-term and long-term financing, financial statement analysis, time value of money, capital budgeting and working capital management.
CREDITS: 3.00

BUS 2403 - Innovation and Entrepreneurship
Develops the concepts and skills of how to start and run

new ventures and discusses challenges entrepreneurs face in a rapidly changing economic environment. Discusses how to develop a business plan and financial feasibility study and synthesise knowledge students have gained from their management, business law and ethics courses. Anchored on the capstone project that requires students to engage with industry and the business environment to create and defend a comprehensive business proposal for a new idea.
CREDITS: 3.00

BUS 2903 - Introduction to Logistics and Supply Chain Management

Examines fundamental concepts of Supply Chain Management (SCM) and Logistics that together underpin corporate strategies aimed at achieving business performance goals. Introduces logistics and SCM principles, processes and strategies from a managerial perspective, and examines them within a framework that requires cross-functional integration of key business processes within the firm and across the network of firms comprising the supply chain. Emphasis is on analysing supply chain issues and aligning logistics and SCM strategies with business performance goals.
CREDITS: 3.00

BUS 2913 - Sustaining Cultural Identity through Tourism and Events

Provides insight into the tourism and event industries and the importance of maintaining cultural identity. Globalisation of tourism and events brings prosperity to the destination but a growing concern is how to maintain distinctiveness and uniqueness of the destination's cultural identity. Emphasises the need for destination visioning and strategic planning to enable the tourism and event industries to flourish while maintaining the integrity and sustainability of cultural heritage and traditions.
CREDITS: 3.00

BUS 2923 - Introduction to Sustainable Property Development and Management

Provides students with a general introduction to the processes and professional activities involved in sustainable property development and management. Explores the career and entrepreneurship opportunities within this professional area. Includes general international principles of property appraisal; linkages to the general economy; the local development process; property marketing; property law; and aspects of property and facilities management.
CREDITS: 3.00

BUS 2933 - Macroeconomics

Introduces the basic concepts and tools of macroeconomic analysis. Demonstrates the measurement of key concerns in macroeconomics: GDP; unemployment; and the price level. Provides analytical models for exploring economic performance and long run growth. Analyses the nature of business cycles and fiscal and monetary policies.
CREDITS: 3.00

BUS3003 - Managing People and Organisations

Gain an understanding of the linkage between organisations; human resource management (HRM) and business success. Exposed to the principles of organisational behaviour and the fundamentals of HRM. Introduced to the concepts of: organisation structure and design; power and politics; motivation and job satisfaction; recruitment and selection, employee development and reward management; and the role of HRM in gaining sustainable competitive advantage for the organisation.
CREDITS: 3.00

BUS 3103 - International Business and Globalisation

Examines how the global context of the business environment impacts upon managerial processes. Understanding business in an international context enables students to appreciate the interrelationships between global business and the environmental, social, technical, legal and regulatory frameworks that influence business operations.
CREDITS: 3.00

BUS 3203 - Strategic Management and Business Policy Simulations

A capstone course in the Business Administration discipline. Through case studies it analyses the nature of competitive advantage, and the various strategies available for firms to develop sustainable business growth in a global environment. Features a complex business simulation game in which students demonstrate a series of inter-related decisions, and their ability to apply business administration concepts in practice for the benefit of an imaginary company.
CREDITS: 3.00

BUS 3406 - Work Related Learning

A range of work related learning activities facilitates students to make direct linkages between the work environment, the application of their chosen major and what they learn in their courses; and gives them flexibility to learn from work experience or to undertake an industry-based project which meets the

same outcomes. It is driven by an evidence-based portfolio approach to assessment, enabling students to bring their contextual learning into the final year of study.
CREDITS: 6.00

BUS 3903 - Contemporary Issues in Business

Introduces students to current thinking and research on contemporary issues in business. An opportunity to develop a foundation for their future major by researching a contemporary business issue in a major business sector. Students will be expected to read, understand, and evaluate research and analysis on this issue, and demonstrate an understanding of how research and analysis affect proposed solutions or responses to the issue.
CREDITS: 3.00

BUS 3913 - Emotional Intelligence for Business Effectiveness

Provides the tools needed to be emotionally intelligent in the workplace. Designed to help students understand the linkage between Emotional Intelligence and business success. Exposes the core principles of Emotional Intelligence which enables students to manage their own impulses, communicate with others effectively, manage change well and solve problems. Learn best practices in developing/leveraging abilities, being aware of self and others, understanding emotions, and emotional management.
CREDITS: 3.00

BUS 3923 - Management Information Systems Incorporating SAP

Focuses on the application of technology - based information systems in organisations as tools for achieving operational efficiency. Studies how information systems support development and management of products and services and the decision making process to achieve competitive advantage. Introduces the different processes of information management in SAP. The major parts of information systems and their interrelationships are evaluated to justify the effective utilisation of the systems.
CREDITS: 3.00

BUS 4113 - Financial Accounting I

Students of the accounting major need to identify and apply the concepts and principles of accounting for merchandising business. Providing an overview of the balance sheet items is of utmost importance. Specific topics include classification and valuation of long-term assets and current assets such as cash, accounts receivables and inventories. It is also necessary to analyse the concepts and procedures related to recording transactions and reporting results to shareholders in a corporate environment.
CREDITS: 3.00

BUS 4123 - Auditing

Providing students with a thorough understanding of the purpose and objectives of audit and concepts and functions of the Accounting Information System (AIS) is essential. Having an opportunity to analyse different audit areas including professional standards and ethical responsibilities of auditors, audit risk and materiality, risk assessments for internal control, internal control for cash receipts and disbursement cycle, audit evidence and reporting on audited financial statements, prepares the graduates for real life tasks.
CREDITS: 3.00

BUS 4133 - Managerial Accounting I

Introducing a business-management approach to the use accounting information for internal reporting and decision-making is crucial in developing managerial skills. The major topics of managerial accounting include profit planning and control measures. Providing in-depth knowledge in cost accounting by focusing on its role in internal reporting and the resulting decision-making processes contributes to the development of analytical skills. Evaluating the basic costing systems is also important, while the review of pricing and profitability concepts and principles, cost allocations, product quality, and investment decisions further broadens the knowledge of the graduates.
CREDITS: 3.00

BUS 4143 - IFRS

The basic understanding of the structure and requirements of International Financial Reporting Standards (IFRS) in a current financial reporting environment is essential for all accountants. Recognising, measuring, classifying, presenting and disclosing financial information according to IFRS standards by providing an opportunity to apply the IFRS standards to all items of a standard financial statement.
CREDITS: 3.00

BUS 4153 - Financial Accounting II

Introducing topics that serve as a foundation for a more detailed study of financial statements is very important for all managers to succeed in the modern world of accounting. Studying the applications of accounting for investments that companies make in stock and debt securities of other companies, and the account for the different forms of leases which can be used in organisations and timing and criteria of revenue

recognition provide a great insight into the details of the operation of a firm.
CREDITS: 3.00

BUS 4163 - Taxation
Understanding tax concepts and issues is important for all accounting students. Explaining the principles and professional standards governing the tax systems is crucial in developing relevant business administration skills. In addition, providing an approach to the taxation of individuals and a more in-depth study of the taxation of different business entities builds solid professional knowledge. Focus on the technical details ensures that graduates have a strong foundation for future practice in taxation and consulting.
CREDITS: 3.00

BUS 4173 - Managerial Accounting II
Developing analytical skills useful for managerial decision making is of high importance. Introducing concepts of advanced managerial accounting is expected to play an important role in servicing the informational needs of managers in planning, organising and controlling functions. This knowledge should help students to become proficient in structuring business decisions systematically and identifying the managerial accounting information relevant to higher level decisions.
CREDITS: 3.00

BUS 4183 - Corporate Finance
Exposure to the various tools used in analysing and evaluating the financial performance of businesses in terms of risk and return is important. Learning how to calculate and analyse various performance ratios and examining the key issues that affect dividend policies is also crucial. Concepts such as the cost of capital, risk and uncertainty in capital budgeting decisions and elements of international finance are also essential in making correct corporate finance decisions.
CREDITS: 3.00

BUS 4213 - Financial Quantitative Methods
The advanced handling of financial concepts is essential in the finance major. Critically exploring the concepts of the time value of money, risk and return relationships, as well as the bond and stock valuation models are essential in understanding the financial markets. Applying the capital asset pricing model to analysing diversified investment portfolios expands the horizons of financial investments. The rigorous financial methods ensure that the analytical skills of the finance major graduates are solid.
CREDITS: 3.00

BUS 4223 - Retail Finance and Banking
Exploring the dynamic environment of the retail finance and banking industry is important for the finance major. Analysing the financial needs of retail clients and providing products of retail banking and insurance to match these needs is essential in financial services. Applying advanced marketing techniques, such as customer relationship management, servicing quality and customer complaints techniques enhances the performance of banks.
CREDITS: 3.00

BUS 4233 - Financial Assets and Markets
Describing and analysing the financial markets, the types of financial assets and the way they are traded, is important for all private and institutional consumers. Evaluation techniques, derivatives and alternative investments, and associated trading strategies to achieve risk-return objectives help all financial managers to make the right decisions to meet their priorities. An overview of equity and capital markets explains the importance of capital markets for the economy and corporations.
CREDITS: 3.00

BUS 4243 - International Trade and Finance
Distinguishing international finance from domestic finance and studying the international financial environment, the foreign exchange market and foreign exchange exposure management, contribute to the development of relevant business administration skills to a great extent. Examining the international monetary system, the balance of payments, the main factors affecting foreign exchange rates and the microstructure of international trade helps in the assessment of an open economy.
CREDITS: 3.00

BUS 4253 - Law, Ethics and Professional Standards
Critically examining legal and ethical issues pertaining to the banking and financial services industry is part of the core knowledge in finance. The focus is on the application of legal and ethical principles, as well as discussing current industry risk concerns, such as mobile banking, Basel III capital requirements, money laundering, bribery, and executive compensation and corporate governance. Comparing risk management and compliance programmes in order to identify best practices in mitigating the ethical and legal risks associated with such concerns develops important analytical skills.
CREDITS: 3.00

BUS 4263 - Corporate Finance and Banking

Providing a framework for assessing the role of banking in corporate finance is essential to be able to develop effective corporate strategies. The approach is rigorous and analytical. Firstly, it analyses issues in the cost of capital assessment, capital budgeting decisions, financing decisions, working capital management and cash flow management which are faced by financial managers in corporations. Then, it critically examines how various banking products may satisfy the financial needs of corporations.
CREDITS: 3.00

BUS 4273 - Wealth and Risk Management

Appraising the various factors that impact investment risk and returns is an important topic in finance. Exploring the characteristics of financial instruments and applying modern portfolio theory to provide financial solutions to meet the investment, retirement, protection, estate and tax planning needs of clients and determining how these solutions can help to deal with both expected and unplanned events develops important professional skills all finance graduates need.
CREDITS: 3.00

BUS 4283 - Islamic Finance and Banking

Islamic finance and banking is different from conventional finance and banking. The principles of Islamic finance, the sources of Sharia Law and the role of the Sharia Supervisory Board should be known to all finance professionals. Assessing the characteristics of Islamic banking and Islamic insurance (Takaful) products in comparison to their conventional alternatives has great importance. Analysing Sukuks (Islamic bonds) and their evolving role in financing corporations provides interesting insights in a special area of Islamic Finance.
CREDITS: 3.00

BUS 4313 - Employee Relations and UAE Labour Law

Building upon an earlier study of the principles of law, in particular the legal relationship between employers and employees, and the common law aspects of that relationship, including contracts and tort, the focus now is on the application of laws specific to commercial enterprises and workplace situations. The objective is to develop skills to recognise competing and conflicting legal interests, rights and obligations in various commercial contexts; understand methods of legal dispute settlement; analyse factual situations; and apply the appropriate law to solve UAE or international scenarios and cases.
CREDITS: 3.00

BUS 4323 - Career Development and Planning

Organisational performance is improved by managing the workforce efficiently and effectively. The critical analysis of the value of career development theories in HR planning builds professional knowledge and develops decision-making skills through strategic thinking. The discussion of the concepts related to mentoring, coaching, replacement charts, skill inventories, career paths, succession planning, position analysis questionnaires, and career development strategies related to plateaued staff contributes to the development of essential human resource management skills.
CREDITS: 3.00

BUS 4333 - Recruitment and Selection

Developing knowledge and skills related to the recruitment and selection process in human resource management has great importance in ensuring that the best people are selected to work in organisations. A thorough discussion of the recruitment and selection processes and the analysis of its role in the overall management of an organisation prepares human resource professionals to perform this important task efficiently.
CREDITS: 3.00

BUS 4343 - Training and Development

Assessing the role of training and development in maintaining a motivated, up to date workforce deepens the professional knowledge of human resource specialists. It enables them to compare the way the training and development function is structured in different organisations and to explore the training delivery techniques used in different training programmes. Using the training cycle to design, develop, deliver and evaluate training, further develops their professional skills.
CREDITS: 3.00

BUS 4353 - International Human Resource Management

Examining the opportunities and challenges associated with managing employees in international and cross-cultural contexts has great importance in the UAE. The discussion of international recruitment, selection, preparation, placement, management development, performance management, reward and remuneration in international, multi-national and trans-national corporations contributes to the development of vital HR skills. Analysing the implications of internationalisation and globalisation on HRM, the differences between domestic and international HRM, and the challenges associated with managing the workforce in foreign

locations enhances critical thinking skills.
CREDITS: 3.00

BUS 4363 - Managing Organisational Change

The review of the nature of change, the driving forces of change, the theories and models of organisation change and the applied analysis of the process of organisational change within the theoretical frameworks of organisation culture, power, politics, resistance to change and leadership greatly contribute to the development of relevant HR skills. Examining both the theoretical and practical approaches to the issues of change diagnosis and strategies to manage and implement the change helps the analysis of local and international scenarios and cases, and builds strong HR skills.
CREDITS: 3.00

BUS 4373 - Strategic Human Resource Management

Strategic-level human resource management challenges of businesses include long-term human resource planning, managing workforce diversity, implementing downsizing strategies, creating outsourcing solutions and managing the workforce in knowledge-based economies. Strategic HRM enables learners to take a critical view of ethical decision-making approaches and best practices in the region for attracting, retaining and developing employees and management from a strategic perspective.
CREDITS: 3.00

BUS 4383 - Performance Management

The comparison of traditional and contemporary approaches to performance management develops an important area of knowledge in human resource management. Learning about the design and implementation of performance management systems, and the role of compensation, incentives and rewards in performance management contributes to vital HR skills. Examining the
CREDITS: 3.00

BUS 4513 - Strategic Decisions with Management Science

An interdisciplinary course that provides efficient methods for several resource allocation, general optimisation, and queuing or simulation problems. Presents various quantitative decision analysis tools to support complex strategic planning decisions. Utilises spreadsheets and practical case studies, allowing students to analyse complex business situations and scenarios, identify the suitable management science technique and recommend solutions for the problems.
CREDITS: 3.00

BUS 4533 - International Quality Management System

Evaluates the components of quality systems and the theoretical and philosophical concepts of quality models. Examines why quality management is fundamental to strategic management and how innovation can improve the performance of any organisation. Focuses on evaluating various strategies for senior managers to improve organisational performance.
CREDITS: 3.00

BUS 4543 - Quality Management Tools

Introduces the students to qualitative and quantitative analytical tools used in a quality management system. An opportunity to study international quality management systems and how efficiently these tools are used to support strategic decision making in managing organisations. Identify problems with workflows within various parts of real organisations. Develops the students' ability to use appropriate quality management tools and to measure their effectiveness towards quality improvement from a strategic perspective.
CREDITS: 3.00

BUS 4553 - Strategic Supply Chain Management

Looks at how strategic supply chain management can be a driver of the firm's overall competitive strategy. Learn how to systematically assess supply chains and then use the knowledge to plan and execute strategic supply chain management according to a theoretical framework to optimise supply chain performance. Evaluate supply chain management practices of real business supply chains.
CREDITS: 3.00

BUS 4563 - Strategic Marketing Management

Highlights the impact of contemporary issues on marketing management planning, and strategy formulation within a complex business environment. Encouraged to critically evaluate the implications of specific decisions and assess various options in making strategic marketing decisions. Through innovative marketing solutions, in relation to brand and market development, recommend strategic developments to enhance competitive advantage and positioning in relation to fluctuating consumer behaviours.
CREDITS: 3.00

BUS 4573 - Advanced Strategic Management

Provides students with conceptual frameworks and analytical tools to identify key drivers of competitive advantage, build business models based upon the firm's unique propositions of value, profit and people, and choose appropriate strategies. Acquire skills to formulate and implement the corporate, business, and

functional strategies. Develop strategy skills through participation in debates, analysis of cases, and ultimately, the development of strategy for one of the local companies.
CREDITS: 3.00

BUS 4583 - ISO Standards and Excellence
Provides an overview of the ISO family of international standards. Engage with industry to develop quality management systems in accordance with ISO standards. Compares various organisational performance, benchmarking, quality awards and other measures of excellence, such as the Baldridge Quality Award, Khalifa Quality Award and Dubai Quality Award.
CREDITS: 3.00

BUS 4623 - International Business Finance
Examines the relationship between the international monetary system, the balance of payments and the foreign exchange markets. Evaluates the methods used by firms to manage their foreign exchange exposure and explores the factors affecting the financial decisions in a multinational business. Through discussion, demonstration, comparison, and analysis, knowledge and skills are developed in the area of international business finance.
CREDITS: 3.00

BUS 4643 - Cross-Cultural Relations Management
Uses a cross-disciplinary approach to understanding important issues and challenges in managing cultural diversity in international business. Theoretical frameworks are used to assess how cultures differ, and how such differences impact businesses. Cross-cultural communication, marketing, negotiation, conflict resolution, the dynamics of managing multi-cultural teams and the impact of innovation are discussed. Through analysis and application, knowledge and skills are developed in the area of cross-cultural management.
CREDITS: 3.00

BUS 4653 - International Marketing for Global Competitiveness
Develops understanding of how international marketing enhances the global competitiveness of a business. Through analysis and evaluation of factors explains how marketing makes a business more competitive in dynamic global markets. International marketing principles are applied to product, service and country-specific situations. Marketing skills and plans that are required for a business to strategically move into a foreign country are developed.
CREDITS: 3.00

BUS 4663 - International Trade
Develops an understanding of the current international trade environment. Theories of international trade, the practice of trade policies, international trade and economic development, world trading arrangements, and issues concerning an open economy are discussed. Explains how trade related factors and changes in the international trade environment impact business opportunities and strategies. Through comparison, evaluation and analysis an understanding of why international trade is a key component in the performance of businesses and nation states is developed.
CREDITS: 3.00

BUS 4673 - International Law
Provides insights into how legal aspects impact international business. Introduces the legal environment of international business and the related risks to be considered in business decisions. The fundamental components of law in international business transactions are reviewed, including how the legal framework of the WTO impacts firms. Foreign Direct Investment and corresponding legal considerations are also discussed. Uses analysis and evaluation to develop knowledge and skills in the area of international law.
CREDITS: 3.00

BUS 4683 - Middle East Development and Logistics
Develops an understanding of the inter-dependence between development, infrastructure and logistics in the Middle East through analysis of factors that influence development, growth and competitiveness, including trade logistics. Allows students to consider the impact of trade logistics and evaluate current development strategies. This course gives students the opportunity to offer ideas on how governments can promote regional business development through trade logistics.
CREDITS: 3.00

BUS 4813 - Supply Chain Concepts and Practices
Reviewing the key functions, decisions and players involved in contemporary supply chains is necessary to understand the importance of supply chain management. Exploring how decisions must be made to coordinate the movement of products and services effectively and efficiently in the supply chain to manage customer service expectations provides great insights to this new area of business administration. The concept of the value chain as a lens to examine how each element is critical to the creation of value for the business, customers and other stakeholders in the supply chain contributes effectively to the analysis of

business strategy.
CREDITS: 3.00

BUS 4823 - LOGISTICS AND TRANSPORTATION 1

Logistics and transportation are two interesting areas of supply chain management. Exploring the roles and best practices of logistics and transportation in the supply chain contributes to the analysis of the performance of a firm. The functions of transportation, warehousing, material handling, packaging, cold chains, security, insurance and economics in logistics are examined in detail, and a framework of how logistics and transportation can optimise supply chain efficiency and improve customer satisfaction is also presented.
CREDITS: 3.00

BUS 4833 - MANUFACTURING IN SUPPLY CHAIN

Focusing on the influence of manufacturing on the supply chain provides another layer to the analysis of supply chain. The knowledge of common manufacturing systems, and methods of manufacturing planning and control is essential to effectively evaluate the supply chain. Exploring how manufacturing decisions affect supplier service and customer service levels is and interesting exercise. It also enables learners to use manufacturing decision-making models in the development of solutions to overcome supply chain challenges.
CREDITS: 3.00

BUS 4843 - SUPPLY CHAIN STRATEGY AND MANAGEMENT

Examining the development of supply chain strategies and their interrelationships and impact on business competitive advantage is an insightful task. Presenting a framework to strategically manage supply chains in rapidly changing markets builds further knowledge in the area of supply chain management, and learning how recent developments and best practices in supply chain management have supported the achievement of improved supply chain performance keeps supply chain management skills up to date.
CREDITS: 3.00

BUS 4853 - LOGISTICS AND TRANSPORTATION II

Focusing on the management of transportation and logistics to achieve supply chain objectives gives an additional layer to the analysis of logistics and transportation covered in the first part of this course. Analysing the cost implications of logistics and transportation in making products available to customers helps evaluating the performance of the firm objectively. It also enables the development of solutions and making decisions for the supply chain involving the efficient integration of suppliers, manufacturers and retail stores with logistics and transportation, encompassing the activities of the firms from the strategic, tactical and operational level.
CREDITS: 3.00

BUS 4863 - PROCUREMENT AND INVENTORY MANAGEMENT

Examining how businesses make buying decisions, or manage their buying processes within the supply chain is an exciting analysis. The different approaches of inventory management and the assessment of inventory decisions affecting buying practices have great consequences on the firm's performance. The discussion of practices including sourcing, procurement and supply management, or inventory classification; and the review of modern approaches to managing inventory such as cost analysis, or the use of information systems to make inventory decisions helps the development of critical thinking and managerial skills.
CREDITS: 3.00

BUS 4873 - SUPPLY CHAIN RISK MANAGEMENT

Reviewing and managing the supply chain from a risk management perspective has great importance. It is in the interest of all organisations to have a coordinated approach involving all stakeholders to reduce supply chain vulnerability. Identifying and analysing the risk of failure points within the supply chain, and quantifying risks via metrics is key to the successful management of the supply chain. Skills to plan, manage, control, share and avoid supply chain risks attributed to various causes and unforeseen events are developed through the analysis of local and international scenarios, and case studies.
CREDITS: 3.00

BUS 4916 - INTEGRATIVE INDUSTRY PROJECT (ACCOUNTING)

The final integrative project has a standardised framework within which research projects of various majors can be accommodated to meet all programme learning outcomes. The final project is designed to collapse the artificial boundaries between subjects and give opportunities for the application and critical review of theory, synthesising the knowledge obtained from several specialisation courses. The project provides high level authentic learning and develops consultancy and client management skills.
CREDITS: 6.00

BUS 4926 - INTEGRATIVE INDUSTRY PROJECT (FINANCE AND BANKING)

The final integrative project has a standardised framework within which research projects of various

majors can be accommodated to meet all programme learning outcomes. The final project is designed to collapse the artificial boundaries between subjects and give opportunities for the application and critical review of theory, synthesising the knowledge obtained from several specialisation courses. The project provides high level authentic learning and develops consultancy and client management skills.
CREDITS: 6.00

BUS 4936 - Integrative Industry Project (Human Resource Management)

The final integrative project has a standardised framework within which research projects of various majors can be accommodated to meet all programme learning outcomes. The final project is designed to collapse the artificial boundaries between subjects and give opportunities for the application and critical review of theory, synthesising the knowledge obtained from several specialisation courses. The project provides high level authentic learning and develops consultancy and client management skills.
CREDITS: 6.00

BUS 4956 - Integrative Industry Project (Quality and Strategic Management)

The final integrative project has a standardised framework within which research projects of various majors can be accommodated to meet all programme learning outcomes. The final project is designed to collapse the artificial boundaries between subjects and give opportunities for the application and critical review of theory, synthesising the knowledge obtained from several specialisation courses. The project provides high level authentic learning and develops consultancy and client management skills.
CREDITS: 6.00

BUS 4966 - Integrative Industry Project (International Business Management)

Uses project-based learning to develop knowledge and skills in areas of the major of interest to students. Merges boundaries between subjects and give opportunities for the application, and critical review, of theory in a practical environment. Informed and supported, where possible, by industry it provides authentic learning and the opportunity to develop consultancy and client management skills.
CREDITS: 6.00

BUS 4986 - Integrative Industry Project (Supply Chain Management)

The final integrative project has a standardised framework within which research projects of various majors can be accommodated to meet all programme learning outcomes. The final project is designed to collapse the artificial boundaries between subjects and give opportunities for the application and critical review of theory, synthesising the knowledge obtained from several specialisation courses. The project provides high level authentic learning and develops consultancy and client management skills.
CREDITS: 6.00

CDA 2303 - Principles of Animation I

Introduces the principles of character animation within a digital context to gain knowledge, skills, critical-thinking abilities as practiced in the industry. Using industry-standard software and tools, develops skills to sketch, analyse and design movement of geometrics. Explains the concepts of movement and timing through guided tutorials, lectures, practical assignments and projects.
CREDITS: 3.00

CDA 3503 - Storyboarding

Explains the concepts and theories of applied storyboarding techniques used to communicate the essential elements of a shot, scene and storyline. Working through case-based instruction, storyboarding conventions for staging, shot variation, scene pacing, camera angle and direction, audio effects (FX) and dialogue are covered. Produces storyboards for both presentation and production purposes.
CREDITS: 3.00

CDA 3513 - Character Design

Develops the essential skills to design a variety of characters that meet the requirements of the script, scene, genre and storyline. Designing characters that reflect a range of cultural, visual and personality styles using industry-standard software, tools and techniques. Experiments characters with costuming and cultural influences are among other skills that are covered.
CREDITS: 3.00

CDA 3523 - Principles of Animation II

Applies four basic principles of animation: overlapping; squash and stretch; anticipation; and staging. Explores the anticipations within character movements and staging to communicate clearly an attitude, mood, reaction or idea through a character. Develops believable animations using industry-standard animation software and hardware.
CREDITS: 3.00

CDA 3603 - 3D Modelling

Using industry-standard software, introduces three-

dimensional objects and simple characters employing a range of 3D modeling and texturing techniques. Focusing on quality of visual design, level of detail and suitability for purpose, the course prepare students for employment in computer animation, games design, architectural modeling and special effects for TV and film industry.
CREDITS: 3.00

CDA 3613 - Multimedia Scripting
Explores Multimedia Scripting that includes Multimedia Object Model as well as basic scripting elements such as variables, control structures, objects, methods and events. Using industry-standard software, languages and tools, develop proper scripting language to manipulate 2D animation to enhance the process of visual thinking or visualisation.
CREDITS: 3.00

CDA 4703 - 3D Animation
Demonstrates the structure of 3D animation production pipeline that includes character rigging and inverse kinematics through the application of industry-standard software, languages and tools . Producing 3D simple objects that can be used for different purposes and critiquing these objects according to the animation principles of a 3D environment along with critique of own and others' work are important components of this course.
CREDITS: 3.00

CDA 4713 - Film Analysis and Narrative Structure
Develops storytelling through the analysis of short animation and live action films, shots and sequences. It covers the elements of story structure, shot selection, scene development, and pacing. It also integrates elements of art direction, composition, color, lighting, music and sound, and editing technique. Enhances the understanding and appreciation of the role that narrative structure and dramatic form, mood and atmosphere play in the development of a script.
CREDITS: 3.00

CDA 4723 - Animation Scripting
Explores the programming principles such as variables, conditions and loop and applies them in the MEL scripting environment. Using industry-standard tools, the course increases the knowledge to select the correct scripting language to produce script controlled 3D animations to give the students an advantage in being able to control the building blocks of computer animation.
CREDITS: 3.00

CDA 4803 - VFX, Audio, Editing, Compositing
Incorporates key skills necessary in visual effects, music and sound, rendering, and compositing in order to assemble all the assets of a short animation production into its final form. Exposure to the basic elements of post-production through exercises using existing assets and the critique of own and others' work enhance skills and competencies to work in cutting-edge animation projects.
CREDITS: 3.00

CDA 4806 - Final Project - Animation
Integrates all the skills, competencies and knowledge students have learned in Animation to accomplish a project of industry standard. Brings together professional, creative and critical approaches to conceptualise, research, plan, develop, execute and evaluate an original and independent project, which will be subjected to peer and industry review.
CREDITS: 6.00

CDF 2303 - Fashion Drawing
Develops the drawing and creative skills needed to function as a fashion designer. Focusing on a variety of fashion illustrations, using both conventional and new media techniques, the course supports unique visual language through a creative process that underlines the importance of drawing basic shapes, lines and contours used in design drawings for a variety of clothing types.
CREDITS: 3.00

CDF 3503 - Fashion Design and Textile
Examines the role of textiles, fibres, and fabric in the fashion industry along with the selection, combination, decoration and application of fabrics are the main topics of this course. Choosing appropriate fabrics for a specific fashion collection while analysing various aspects of fabrics and textile including comfort, appearance, textures, draping abilities, and various combination effects are other important aspects of the course.
CREDITS: 3.00

CDF 3513 - Fashion Draping and Pattern Making
Describes the techniques of draping as well as the basics of pattern making. The draping segment covers the fundamentals of draping that include the ability to drape and fit toiles or muslins according to specific measurement and fit standards with opportunities to practise the skills on dress forms. The pattern making segment places emphasis on precision pattern drawing, basic pattern production, development of blocks and application of measuring techniques to record body and dress form measurements.
CREDITS: 3.00

CDF 3523 - Fashion Design and Technology I
Explores the required knowledge and skills in fashion design and technology application from concept development stage to editing and presenting a fashion collection. Deploying appropriate technologies in design and illustration, demonstrating advanced technical skills in garment production technology using different kinds of sewing machines and CAD, preparing professional presentation by creating personal portfolio and web site are other aspects of this course.
CREDITS: 3.00

CDF 3603 - Fashion Design and Trend Research
Develops further research skills by examining the evolution of fashion trends and its cycles is the main goal of this course. The other integral component of the course includes analysing the impacts of cultural influences on fashion trends, comparing and contrasting different types of fashion trend forecasting methods, and designing a wide range of popular trend boards.
CREDITS: 3.00

CDF 3623 - Fashion Design and Technology II
Assesses the applications of relevant technology in the fashion design, production and presentation process. Developing original ideas, designing unique fashion collections by utilising appropriate technology such as Adobe Illustrator, producing commercial and non-commercial garments, and creating professional presentation are other aspects of this course.
CREDITS: 3.00

CDF 4703 - Fashion Design and Production
Analyses the fashion production process and apply the required knowledge to produce specific collections. Exploring the process from the initial stages of fashion project development to the final collection, by examining fabrics trends and identifying a target market are also covered.
CREDITS: 3.00

CDF 4713 - Fashion and CAD Design
Develops key skills in the use of Computer Aided Design (CAD) software to design and create mini fashion collections to equip students with technical knowledge and core competencies to perform as fashion designers. Composing a CAD digital visual diary, completing one fashion project from design to production, and presenting the project are crucial elements of this course.
CREDITS: 3.00

CDF 4723 - Fashion Marketing
Analyses the theoretical and practical understanding of fashion marketing. Exploring the fundamentals of fashion marketing including general fashion marketing concepts, the marketing environment and types of markets, analysing a target market and how to conduct market research for the fashion industry are also covered.
CREDITS: 3.00

CDF 4803 - Fashion Merchandising
Explores solid foundation for success in entry-level positions within the Fashion Merchandising field by analysing concepts related to the commercial and professional elements of fashion. Students analyse all aspects of merchandising and marketing within fashion and its related industries.
CREDITS: 3.00

CDF 4806 - Final Project - Fashion Design
Integrates all the skills, competencies and knowledge students have learned in Fashion Design to accomplish a project of industry standard. Brings together professional, creative and critical approaches to conceptualise, research, plan, develop, execute and evaluate an original and independent project, which will be subjected to peer and industry review.
CREDITS: 6.00

CDG 2303 - Introduction to Graphic Design
Explores the elements and principles of both two and three dimensional design to equip students with the concepts, skills and competencies to become versatile practitioners in a wide range of media and professions. Focusing on colour theory, colour systems and typography, the course describes composition, rendering and production techniques using sketching and industry-standard software methods.
CREDITS: 3.00

CDG 3503 - Typography I
Introduces essential aspects of typography such as letter forms and page structures. Develops an understanding of the historical background, technical and aesthetic issues, and communicative abilities of typography through exploration and application of various design scenarios. Explores type solution and applies basic typography concepts to given situations.
CREDITS: 3.00

CDG 3513 - Introduction to Design Illustration
With a strong emphasis on concept development, this course analyses the professional field of illustration to produce effective visual narratives. Applying a variety of media and formats, explores the functionality of illustration effectiveness for presentation and distribution. Developing a dialogue of drawing and illustration issues becomes part of the classroom

experience to equip students with the concepts and skills to work effectively in creative industries in the region.
CREDITS: 3.00

CDG 3603 - Typography II
Using the foundation of typographic basics like letter forms and page structure, develops a greater understanding of typographic form through exercises based on the setting of words, phrases, sentences and short paragraphs. Analyses type classification through appropriate use of type principles and resolves visual communication problems by creating typographic grids.
CREDITS: 3.00

CDG 3613 - Studio I
Examines the application of design principles and elements. Through extensive critical research on existing visual communication, analyses visual communication issues and develops creative processes while critiquing work. Facilitates creative resolution of communication problems and produces design solutions based on real design case studies through research, critical analysis of the application of learned design principles, design elements and typography.
CREDITS: 3.00

CDG 3623 - History of Graphic Design
Through a chronological survey, examines how, since 1450, graphic design has responded to (and affected) international, social, political, and technological developments. Focusing on printed work from 1880 to 1970, develops an understanding of visual communication in historical context and its application to design practice. Applies knowledge learned from design history to a design project.
CREDITS: 3.00

CDG 4703 - Studio II
Applies design principles, elements and typographic skills in the solution of a design project faced by professional visual communication offices. Resolves more advanced problems that represent current visual communication issues through extensive research and the application of learned concepts and skills. Through critiques and feedback sessions, assess design effectiveness according to the requirements of the design brief.
CREDITS: 3.00

CDG 4713 - Packaging Design
Addresses the theory behind, and the studio investigation of, three-dimensional structures as they relate to the area of packaging, exhibition, advertising and environmental design. Through experiment with different materials while addressing client briefs, ensures design rationale addresses the target market. Develops skills by creating a package design for industry use.
CREDITS: 3.00

CDG 4723 - Sustainable/Social Design
Explores how the designer's role in shaping the public narrative on sustainable/social issues, causes and other needs-based topics, is crucial in becoming an accomplished graphic designer. By analysing contemporary environmental, cultural and societal issues around the world that have an impact on daily lives, applies creative design processes that increase awareness, motivate, inspire or incite action from specific, or broad, audiences. Through critiques and feedback sessions, assess design effectiveness according to the requirements of the design brief. </p
CREDITS: 3.00

CDG 4803 - Photography for Graphic Design
Develops an ability to see things through the use of a digital camera both inside and outside the studio and analyses the concept development process. Researches photography styles used in media design and through shooting assignments, and applies photography as another means of image-making for designers. Creates image-making solutions as they relate to a designer's brief and critiques effectiveness.
CREDITS: 3.00

CDG 4806 - Final Project - Graphic Design
Integrates all the skills, competencies and knowledge students have learned in Graphic Design to accomplish a project of industry standard. Brings together professional, creative and critical approaches to conceptualise, research, plan, develop, execute and evaluate an original and independent project, which will be subjected to peer and industry review.
CREDITS: 6.00

CIA 2503 - Web Applications Development
Develop an understanding of Web Applications and their underlying technologies including the role of client-side and server-side scripts. Apply web design practices and methodologies used in creating interactive web-based user interfaces. Apply the concepts of user authentication, personalisation, data validation and persistence to functioning web applications with access to data stored on a server.
CREDITS: 3.00

CIA 3103 - Database Design and Administration
Apply data modelling, database design and database administration techniques on an RDBMS server. Learn how to use Structured Query Language (SQL) to define, manipulate and administer data. Develop an understanding of the concept of database administration and define the duties and responsibilities of database administrators.
CREDITS: 3.00

CIA 3203 - Game Development
Commencing with a comprehensive overview of the games development process including important historical perspectives, content creation strategies, production techniques, platforms, genres, character development and gameplay. Developing critical skills for designing and creating interactive online games, including developing a storyline, storyboarding, interface design, integrating audio and video, and ensuring the key game assets meet the specifications as required.
CREDITS: 3.00

CIA 3303 - Principles of Mobile Applications
Examine various industry compliant user interfaces as applied to mobile applications. Learn how to pass data between pages and to use the local storage system. Create smart apps that use the location-based services. Design and develop apps that will be deployed to the actual device that is compatible with the technology.
CREDITS: 3.00

CIA 3403 - Cloud App Development
Discuss the basic concepts of cloud computing and the types of cloud-based services. Develop a deep understanding of the working of cloud computing platforms. Build new kinds of cloud apps and their different styles of programming and usage of computers.
CREDITS: 3.00

CIA 4003 - Advanced Mobile Applications
Develop the knowledge and skills required to create mobile applications that connect to external data sources, control device hardware, use cloud storage and its services, and include multimedia content, graphics, and animation. Develop and deploy secured applications by implementing multi-level security and upload your apps to the relevant market place.
CREDITS: 3.00

CIA 4103 - Data Driven Web Technologies
Examine how to validate user input on both client-side and server, handle exceptions and maintain application state. Learn how to interact with different data sources. Develop advanced skills in the CRUD operations through server-side codes. Implement security principles through user authentication, roles, and user authorisation.
CREDITS: 3.00

CIA 4203 - Enterprise Database Applications
Develop a comprehensive understanding of advanced topics pertinent to database management systems (DBMS) and study how they are being applied in a business environment. Examine the advanced concepts used to design, implement and administer database applications on client server configuration. Using different tools, develop forms and reports, control objects and codes for mitigation of data entry errors, and implement security measures.
CREDITS: 3.00

CIA 4503 - Advanced Object Oriented Programming
Apply object oriented concepts in providing solutions for problems faced by software developers. Demonstrate ability to appropriately apply the concepts of abstract classes, inheritance, polymorphism, interfaces, method overloading, aggregation, compositions, and associations in developing object oriented code. Develop applications that include a database back-end component.
CREDITS: 3.00

CIB 2003 - Technology Based Marketing
Examine the basic concepts and processes of effective marketing, focusing on current and emerging technology based marketing strategies, principles and concepts and how technology may impact upon the marketing process. Apply marketing mix strategies for products and services using technology enabled strategies.
CREDITS: 3.00

CIB 3003 - Human Resource Management and Systems
Develop a comprehensive understanding of Human Resource Management theoretical and practical concepts from policies, procedures and activities to HR IT systems. Examine HR processes and systems, tools and contemporary developments and assess their impact on the success of organisations both locally and internationally.
CREDITS: 3.00

CIB 3103 - Object Oriented Analysis and Design
Examine one practical, complete, object oriented analysis and design (OOAD) road map from

requirements gathering to system design. Develop the concepts and techniques necessary to effectively use system requirements captured in use cases to develop a robust design model using OO architecture, human computer interaction and data management designs.
CREDITS: 3.00

CIB 3203 - Accounting For Managers

Examine how to use accounting as a system for gathering and reporting information and develop an understanding of its role in business decision making. Understand the major steps of the accounting cycle as it relates to the processing of financial transactions through an accounting information system in each accounting period. Demonstrate an understanding for accounting terminology and principles; prepare financial statements, operating budgets and financial budgets; and perform Cost-Volume-Profit analysis.
CREDITS: 3.00

CIB 3303 - E-Business Principles

Discuss the evolution of e-Business. Develop a sophisticated understanding of e-business and evaluate its opportunities, limitations and impact on traditional businesses and institutions especially for UAE-based organisations. Evaluate current and emerging e-business strategies, technologies and related security, legal and ethical issues.
CREDITS: 3.00

CIB 3403 - Advanced Database Technologies

Discuss advanced database technologies and business intelligence tools that help modern day enterprises store, access and analyse data essential in decision making. Focus on such database technologies as data warehousing, data mining, XML data and information retrieval. Assess the importance of data quality and such issues as integrity, consistency, concurrency and security.
CREDITS: 3.00

CIB 4003 - E-Business Applications Development

Develop the skills required to build e-commerce applications. Develop server side applications that generate content, maintain state, authenticate users, connect to databases, and provide security of transactions and confidentiality of data. Build a complete e-commerce web application that handles memberships, online catalogues, shopping cart module, and checkout.
CREDITS: 3.00

CIB 4103 - Business Finance

Develop a comprehensive understanding of financial and accounting concepts and skills to integrate financial data with relevant information systems. Discuss financial and accounting concepts and issues that will contribute positively to your ability to design integrated business solutions enabled by information technology. Apply those concepts to IT infrastructure, business solutions, IS management and implementation projects in the business environment.
CREDITS: 3.00

CIB 4203 - Customer Relationship Management Systems

Use Customer Relationship Management (CRM) to support business processes and development. Examine how to utilise the information technology resources, strategies, software and processes needed to support an effective CRM strategy. Assess, in particular, CRM techniques, to enhance customer service, sales force effectiveness and marketing strategy. Evaluate the benefits of creating customer loyalty, developing market intelligence and embedding a customer relationship management system into an organisation.
CREDITS: 3.00

CIB 4603 - Enterprise Resource Planning

Develop a sophisticated understanding of the concept of ERP systems and how business processes interact in an ERP system in areas of: Procurement, Materials Management, Production Planning and Execution, Sales Order Management, Financial Accounting and Controlling, and Enterprise Asset Management. Develop in-depth theoretical and practical knowledge regarding ERP through exercises and case studies.
CREDITS: 3.00

CID 1003 - Introduction to Internet Technologies

Discuss the basic concepts of the internet, the World Wide Web and their underlying technologies. Demonstrate skills in using Internet-based tools such as email, web browsers and file transfer applications, as well as various types a variety of website types including social media, blogs, student forums and mobile web applications. Observe Internet Etiquette when using the World Wide Web. Understand societal issues and emerging Internet technologies.
CREDITS: 3.00

CID 1013 - Computer Hardware and Software

Recognise the different types of computer systems. Identify the essential hardware and software components of a computer system including the internal hardware components, and various types of software. Construct a functional computer from physical components and

install the required operating system and basic software. Perform basic system security and administration.
CREDITS: 3.00

CID 1023 - Basic Networking
Recognise the standard computer network devices, protocols and media. Construct a network for a small business, understand IP addressing, configure the network devices for both wired and wireless networks and administer network resource sharing. Apply basic network security and troubleshoot networking issues and problems for a small business network.
CREDITS: 3.00

CID 1053 - Web Design
Identify the fundamental concepts necessary for planning, designing, developing and publishing static web sites. Use industry standard web page development tools to create static web sites including site maps, page layouts, navigation, images, multimedia objects, text, tables, and forms. Recognise front end validation techniques.
CREDITS: 3.00

CID 1063 - Databases
Interpret basic database concepts and use basic data modeling techniques to plan and design a small business database. Illustrate ability to understand entity relationship diagrams and map them to relational databases. Demonstrate ability to use basic SQL statements to create tables and retrieve data.
CREDITS: 3.00

CID 1123 - Customer Service Skills
Recognise the importance of building and maintaining effective customer relationships by meeting the needs of both internal and external customers. Demonstrate the ability to monitor and solve customer service problems; process customer service complaints; handle difficult customers; respect diversity; work with others to improve customer service; and provide excellent customer service in person, online and via the telephone.
CREDITS: 3.00

CID 1203 - Networking Concepts
Interpret the basic concepts of the OSI and TCP/IP networking models, and apply basic network communication protocols. Identify the different layers of the TCP/IP model including the Access Layer, Internet Layer and Transport Layer with a basic introduction to the Application Layer. Demonstrate the ability to work with IP addressing and subnetting techniques to design a basic local area network. Illustrate ability to work with simple cabling, configure basic devices, and test network connectivity.
CREDITS: 3.00

CID 1303 - Advanced Productivity Tools
Illustrate ability to use advanced personal productivity tools such as manipulating tables in word processors; creating professional reports; using mail merge; sorting and filtering data, applying formulas and functions in spreadsheets, using conditional formatting, using personal calendar management; keyboarding in English; and using cloud-based storage and web applications.
CREDITS: 3.00

CID 2003 - Database Management Systems
Explain concepts related to database control including database management and database security. Demonstrate ability to apply database modeling techniques and concepts of reducing anomalies to design databases for business cases. Use SQL to create multi-table databases to address business and organisation needs.
CREDITS: 3.00

CID 2013 - Security Fundamentals
Explain the key concepts, basic principles and techniques related to security and assurance of information resources with a focus on the practical aspects of risk identification and inspection techniques. Demonstrate the ability to develop a risk management plan for a small business and understand the legal and public relations implications related to security and privacy.
CREDITS: 3.00

CID 2053 - Information Assurance
Explain the legal, ethical, social and professional issues in information security. Understand information security and architecture. Identify ways of dealing with intruders in an information system and work out response plans. Demonstrate ability to design and implement a disaster recovery plan for organisation information assets.
CREDITS: 3.00

CID 2087 - Applied Diploma Work Placement
Demonstrate the ability to deal with a range of work-related learning activities that can be accommodated to meet defined learning outcomes. Flexibility is provided to learn from work experience and to receive an understanding of business and technology and its real life operations, where possible in a chosen major topic, or to undertake an industry-based project which meets the same outcomes.
CREDITS: 7.00

CID 2094 - APPLIED DIPLOMA PROJECT

Demonstrate ability to integrate the skills and knowledge acquired throughout the programme, and work in teams to develop a solution to an industry-based problem, relevant to the programme major. Demonstrate ability to apply project management techniques and elements of the System Development Life Cycle approach.
CREDITS: 4.00

CID 2203 - LOCAL AREA AND WIRELESS NETWORKING

Explain intermediate networking concepts including physical addressing, network devices, network types and routed protocols with a focus on the characteristics of Ethernet as the predominant LAN technology. Demonstrate ability to acquire the practical skills to configure networking devices such as switches and routers and to set up office wireless networks.
CREDITS: 3.00

CID 2213 - NETWORK SERVICES ADMINISTRATION

Recognise the concepts and skills required for successful planning, installation, configuration and administration of an enterprise operating system. Develop administration skills on standalone servers in a workgroup environment to prepare for advanced courses in administration of domain-based enterprise networks. Demonstrate ability to create users and groups and configure other network resources.
CREDITS: 3.00

CID 2223 - NETWORK DOMAIN ADMINISTRATION

Recognise the concepts and skills required for successful planning, installation, configuration and administration of a domain-based operating system, and discuss the basics and benefits of virtualisation. Demonstrate ability to promote servers from a workgroup environment to a domain environment and administer domain-based enterprise networks. Demonstrate ability to create users and groups, implement group policies and configure a range of network features and services.
CREDITS: 3.00

CID 2303 - FUNDAMENTALS OF DIGITAL MULTIMEDIA

Recognise various multimedia components such as text and 2D graphics. Examine software applications used for creating and editing text and 2D graphics. Demonstrate ability to go through the various stages involved in the design, development and delivery of static multimedia content. Identify the technological progress in multimedia environment.
CREDITS: 3.00

CID 2313 - E-OFFICE PROCEDURES

Recognise the role of the administrative assistant within an organisational structure, as well as the document lifecycle of paper and electronic records. Demonstrate hands-on skills in paper and electronic records management, basic office procedures for processing mail and faxes, keyboarding in English and preparation of basic business documents from handwritten drafts.
CREDITS: 3.00

CID 2323 - INTERACTIVE MULTIMEDIA TOOLS AND APPLICATIONS

Demonstrate ability to practically design, create and edit multimedia audio and video files using different techniques. Illustrate experience of designing, developing, and integrating multimedia elements to develop and deliver a functional interactive multimedia application.
CREDITS: 3.00

CIM 2003 - GRAPHIC DESIGN FOR MULTIMEDIA

Examine the fundamental elements and principles of graphic design in both print-based and digital applications. Develop an understanding of the design process from the development of concepts and visual to the production of Web/print-ready images. Demonstrate an understanding of typeface selection. Discuss aspects of colour theory systems. Compositing, rendering and production techniques are demonstrated using visualisation, abstraction methods and industry-standard image processing software.
CREDITS: 3.00

CIM 2103 - STORYBOARDING FOR MULTIMEDIA

Build a visualisation to present an idea or plan prior to developing a linear or interactive multimedia application. Employ aspects of storyboard production including interpretation of concepts and scripts, layout and design and drawing for user interfaces. Implement interaction design using software skills for the production of digital visualisation techniques, movie and animation storyboarding including animatics and design layout and interaction for game levels.
CREDITS: 3.00

CIM 3003 - 2D ANIMATION

Discuss the history and types of 2D animation, and the theory behind the concept of animation – namely, the persistence of vision. Identify the basic principles of 2D animation. Create 2D animation in linear and interactive applications. Describe the concepts and mechanics of sound synchronisation, lip-synching and integration of sound to 2D animated sequences. Utilise professional animation tools and applications to develop 2D digital animation sequences that incorporate contemporary animation principles and techniques.
CREDITS: 3.00

CIM 3203 - Programming for Multimedia

Introduce programming as a creative tool for digital image and audio processes. Develop an understanding of object-based constructions and multimedia delivery requirements. Examine the concept of event-driven programming, and identify how it can be utilised to introduce interactivity and animation into a multimedia application. Discuss the use of GUI elements to enhance the interactivity of multimedia application and implement user interaction using various input devices. Develop multimedia programmes with animation features for games or educational applications.
CREDITS: 3.00

CIM 3403 - 3D Modelling and Animation

Explain 3D modelling for 3D animation and develop an understanding of the basic structure of 3D modelling and virtual environment creation. Create scenes with 3D models of objects and characters, using different materials, surfaces, textures and shadings. Apply proper timing by using key-frames and the principles of animation to develop 3D animations. Animate complex objects utilising skeletons, rigging, constraints and kinematics. Apply appropriate lighting and proper camera type and attributes to render 3D animation.
CREDITS: 3.00

CIM 3503 - Computer Game Design and Development

Examine the basic concepts and techniques of electronic game design and development. Explore the history of games and genres, level and model design, theory of Funativity, and game design and processes. Develop the skills required to build a basic computer game using scripting and programming including computer graphics, animation, and artificial intelligence.
CREDITS: 3.00

CIM 4003 - Multimedia Scripting

Review advanced concepts of scripting for multimedia, and learn how to design and develop sophisticated multimedia products for education, entertainment and business through the use of advanced scripting and development tools. Apply the design process and various design components engaged in a typical interactive multimedia application or game. Develop an interactive multimedia application or game that uses scripting techniques for player interaction with other characters and objects in the game environment.
CREDITS: 3.00

CIM 4103 - Web Authoring and Administration

Examine advanced knowledge and technologies needed to create, publish and manage professional-quality web sites that meet the web guidelines and standards for HTML 5, CSS 3 and accessibility. Design and develop functional and a professional-level web site for a given small business organisation. Integrate multimedia elements using HTML5, animation and industry accepted multimedia software packages. Employ graphics, audio, video, interactivity element for a web-based presentation using JavaScript, CSS styling, API and Custom Controls.
CREDITS: 3.00

CIM 4203 - Virtual Reality and Simulation

Examine emerging electronic technology of Virtual Reality (VR). Learn key concepts needed to understand and evaluate VR systems, applications, simulators, and their impact on future digital systems and user interfaces. Discuss key simulation topics including stochastic modeling, random number generators, discrete-event simulation approaches, simulated data analysis, and simulation variance reduction techniques. Evaluate current VR technology systems. Produce an interactive simulation for a system that requires the use of prediction methods.
CREDITS: 3.00

CIM 4303 - VFX, Audio, Editing and Composition

Discuss the entire production process including key production and post-production, digital film-making, compositing, editing, motion graphics, effects and computer graphics interface (CGI). Develop a critical understanding of the techniques and technology used to create high quality digital visual effects.
Build the necessary skills required to work in post-production. Create a rich portfolio of work that showcases technical, artistic and team-working abilities.
CREDITS: 3.00

CIN 2003 - Enterprise Network Services

Explore concepts and technologies behind domain-based enterprise networks. Install, configure and administer an enterprise network operating system and configure protocols, services and server functions such as storage, backup and disaster recovery to the level required to effectively administer a secured domain-based enterprise network.
CREDITS: 3.00

CIN 2103 - Networking Fundamentals

Exploring the OSI and TCP/IP layered models is fundamental to understanding how computing devices communicate with each other. Analyse the role the various protocols play in relation to physical and logical addressing, network types, end-to-end connectivity and application requirements and develop abilities to

assess key factors in designing and building effective computer networks.
CREDITS: 3.00

CIN 2203 - ROUTING PROTOCOLS

Understanding how routers learn about remote networks and find the best path for data packets to reach a final destination is essential to becoming a competent networking professional. Select and configure routing protocols and implement enterprise solutions such as Access Control Lists (ACLs) and Network Address Translation (NAT) to create secure network connectivity within organisations and to the public Internet.
CREDITS: 3.00

CIN 3003 - LAN SWITCHING

Discuss the features of a layer 2 and layer 3 switching, and learn how a switch interconnects and communicates with other switches and routers in networks. Build efficient, secure and reliable switched networks of varying size in response to business needs and apply effective troubleshooting techniques to ensure reliable communication between all devices on the network.
CREDITS: 3.00

CIN 3103 - WIRELESS NETWORKS

Learn the fundamentals of wireless communication including terminologies and behaviours associated with radio frequencies, components, standards and relevant organisations. Work in teams to perform case analyses, site surveys and measurement techniques to plan, design and implement secure wireless networks and evaluate their performance.
CREDITS: 3.00

CIN 3203 - WAN TECHNOLOGIES

Explore how Wide Area Network technologies such as PPP, Frame relay and Broadband technologies are used to connect networks over great distances and allow remote business branches to communicate securely. Critically evaluate case-based scenarios and select appropriate procedures and technologies to design, build and troubleshoot enterprise network solutions in response to complex business needs spanning multiple locations.
CREDITS: 3.00

CIN 3303 - NETWORK SECURITY

Investigate the principles of network security including threat identification, risk analysis, risk management and risk avoidance. Configure network devices including routers and firewalls to prevent network attacks and to protect vital business assets. Analyse risk and assess vulnerabilities based on case scenarios and develop and implement policies, procedures and technologies to avoid potential threats, balancing business and security needs.
CREDITS: 3.00

CIN 3503 - VIRTUALISATION TECHNOLOGIES

Identify the key concepts of virtualising a classic data centre. Build a virtual infrastructure and manage resources in the virtual environment.
Implement disaster recovery solutions to provide Business Continuity (BC) and Disaster Recovery (DR) for the virtual environment.
Secure the virtual environment using industry best practices and maintain security for the virtual environment.
CREDITS: 3.00

CIN 4003 - ROUTING SOLUTIONS FOR THE ENTERPRISE

Develop a critical understanding of design, configuration and implementation of exterior gateway protocols, remote connectivity and path control in enterprise networks. Explore route redistribution, path control branch and mobile connectivity. Apply the needed skills to design, implement and configure multiple routing protocols in a large network.
CREDITS: 3.00

CIN 4103 - NETWORK MANAGEMENT

Examine the fundamental concepts of network management, network management protocols, network management tools and implementation. Analyse and troubleshoot networks and examine various standards used for network management. Apply industry standards into practice and build a robust network operation and management plan for businesses.
CREDITS: 3.00

CIN 4203 - VOICE OVER INTERNET PROTOCOL (VOIP) FUNDAMENTALS

Focus on the VoIP network design, planning and implementation. Investigate the operation and troubleshooting of networks with integrated services for voice over IP (VoIP). Examine the role of Quality of Service (QoS), coding of voice and call setup in IP telephony networks.
CREDITS: 3.00

CIS1003 - INFORMATION SYSTEMS IN ORGANISATIONS AND SOCIETY

Understanding the fundamental and changing role of information within organisation and society. Exploring how information technology (IT) supports decision making. Enabling improvements in communication, quality, efficiency, and effectiveness. Investigating emerging technologies and the local and global impact

of such technologies on individuals, organisations and society.
CREDITS: 3.00

CIS 1103 - Hardware and Networking
Introduce the fundamental computer systems hardware, architecture and various components. Provide a comprehensive understanding of modern computer systems, by covering variety of computer devices, and peripherals. Explore the various communication techniques based on the network layer model including application, transport, network and link layers. Develop an understanding of peer to peer networking, computer network security and computer network management.
CREDITS: 3.00

CIS 1203 - Web Technologies
Introduce the basic concepts of the World Wide Web and its underlying technologies. Define the functions of web browsers and web servers for accessing resources over the internet. Provide a comprehensive understanding of various multimedia components such as 2D graphics, 3D graphics, audio and video and integrate these components into website development. Create, test and publish a website, maintaining a range of webpages and sites using HTML, JavaScript, and CSS that integrate multimedia applications.
CREDITS: 3.00

CIS 1303 - Data and Information Management
Examining relational database concepts and exploring simple database application development. Identifying organisational requirements, database design and implementation, and business application development. Developing practical skills in building database systems using different types of queries to retrieve and/or manipulate data, through customised forms and reports.
CREDITS: 3.00

CIS 1403 - Fundamentals of Programming
Exploring the fundamental concepts and terminology of programming through logical thinking/problem solving. Designing and writing simple computer programmes within an integrated development environment. Covering the concepts and techniques of variables, data types, sequence, selection, iteration, classes, objects, methods and the mechanics of running, testing and debugging programmes.
CREDITS: 3.00

CIS 2003 - Statistics and Probability
Discussing statistics and business information terms and applying them in changing business environments. Developing a clear theoretical understanding of various analytical tools including descriptive statistics, probability, hypothesis testing and correlation and regression analysis; and an appreciation of the application of analytical tools to IT/Business decision contexts.
CREDITS: 3.00

CIS 2103 - Principles of Information Assurance, Security and Privacy
Describing the key concepts related to security and assurance of information assets. Exploring information risks, security frameworks and controls, and
relevant legal, ethical, and professional issues. Discussing security-related activities, such as inspection and protection of information assets, detection of and reaction to threats, and examining pre- and post-incident procedures. Designing and implementing an information assurance plan to protect an organisation's information.
CREDITS: 3.00

CIS 2203 – Applied Discrete Mathematics
Introduce the functional computational aspects of a variety of data structures including sets, relations, discrete functions, graphs and trees. Engage with formal systems, including propositional and predicate logic, sequences, summations, and mathematical induction. Develop the capacity to read and construct valid proofs of the properties of algorithms.
CREDITS: 3.00

CIS 2303 - Systems Analysis and Design
Describing established and evolving methodologies for the plan, analysis, design and development of an information system using traditional and structured system analysis method. Identifying the systems development life cycle phases, modelling tools and techniques, testing procedures and the need for systems evaluation.
CREDITS: 3.00

CIS 2403 - Object Oriented Programming
Describing object oriented programming and its advanced characteristics. Exploring the object oriented programming paradigm; objects and classes; data abstraction and encapsulation; and exception handling, and the Collections Framework. Demonstrating the necessary skills to write, debug and implement programmes using OO terminology.
CREDITS: 3.00

CIS 2903 - Operating Systems
Introduces operating system concepts, architecture, platform and features. Topics include process synchronisation, intercrosses communications,

processor scheduling, memory management, virtual memory, I/O, and file systems. Open Source operating system will be used to perform installations, managing storage, managing files, administering users and group, installing and configuring local services.
CREDITS: 3.00

CIS 3003 - HUMAN COMPUTER INTERACTION

Exploring the fundamental concepts of human-computer interaction. Developing skill in understanding usability and testing, user-centred design, human cognitive principles and models, information and interactivity structures, interaction styles and techniques. Applying dialogue method, response time and display rates, information presentation, interactive devices, information search and visualisation and hypermedia to develop an interface of computer-based solutions.
CREDITS: 3.00

CIS 3103 - PROJECT MANAGEMENT

Developing an understanding of the basics of project management concepts and methods. Examining the project management framework, including key terminology, project management context, and project management processes. Demonstrating skills in managing budgets, schedules, and human/material resource allocations activities associated with project management quality, communications, risk and procurement.
CREDITS: 3.00

CIS 3203 - ENTERPRISE ARCHITECTURE

Develop advanced skills and knowledge about the foundational concepts of enterprise architecture and how it serves to integrate strategic, business, and technology planning methods to support enterprise-wide information technology resource development in the context of business requirements. Evaluate principles and best practices of enterprise architecture, and develop a comprehensive approach to articulating the subject matter involving real-world case studies.
CREDITS: 3.00

CIS 3303 - SYSTEM ARCHITECTURE AND INTEGRATION

Provide a comprehensive understanding of a number of system integration techniques that address specific requirements, including software and hardware acquisitions, integration issues and acceptance testing. Diagnose and troubleshoot systems interoperability and interface integration issues. Develop project plans that incorporate the influence of business processes and culture on system architecture decisions.
CREDITS: 3.00

CIS 4203 - INFORMATION TECHNOLOGY STRATEGY AND GOVERNANCE

Developing an understanding of IS Strategy and Governance, decision rights, strategic frameworks and mechanisms, alignment of strategy, governance and performance with related change management issues and schemes. Exploring IS strategy and governance that enable accountability, participation, predictability and transparency. Demonstrating the responsibility of the board of directors and executive management in an organisation, and their integral role in enterprise governance.
CREDITS: 3.00

CIS 4803 - WORK RELATED LEARNING (5 WEEKS)

Presenting a framework within which a range of work related learning activities can be accommodated to meet defined learning outcomes. Developing an understanding of business technology and its real life operations to develop an industry-based project that meets an organisation's requirements. Demonstrating the skills in documenting and presenting the project components.
CREDITS: 3.00

CIS 4906 - CAPSTONE PROJECT (INTEGRATIVE AND CONSULTANCY FOCUSED)

Applying and integrating the knowledge of the development life cycle project management, development tools, and skills gained throughout the major to plan, analyse, design, and build a fully functional information system component to solve a business problem for organisations. Demonstrating an understanding of the skills in documenting and presenting the project to company representatives.
CREDITS: 6.00

CMC 2303 - CORPORATE COMMUNICATION I

Explores the principles and concepts of corporate communication including key definitions, dynamics and the tools of corporate communication. Develops the skills needed to execute and analyse essential strategies or tools, to help students engage with various corporate stakeholders as well as overcome challenges in the contemporary corporate world.
CREDITS: 3.00

CMC 3503 - SOCIAL MEDIA

Describes different issues arising in the online communication field focusing on opportunities and challenges available to organisations and journalists. Explores how to use a variety of social media sites (Facebook, Twitter, Linkedin, YouTube, and others) through the examination of the evolution and

practice of social media with emphasis on issues of ethics, privacy, reputation management, identity and continuity.
CREDITS: 3.00

CMC 3603 - Media Relations
Evaluates the issues in communication and media theory in relation to the local media environment, focusing on the current media situatio. Historical aspects of the new media and their attributes are balanced with the more controversial issues of contemporary communication technologies. Facilitates production and execution of competitive media campaigns, targeting the appropriate audience, tracking and evaluating the final product, coordinating and preparing for interviews and interacting with media organisations.
CREDITS: 3.00

CMC 3613 - Corporate Communication II
Examines a variety of corporate communication functions such as crisis communication, investor relations, issues management and public affairs, media relations, internal communication and corporate social responsibility. Explores a variety of local, regional, and international case studies, discussing the complexities of the world of corporate communications. Develops skills to help write case studies on relevant corporate communication issues.
CREDITS: 3.00

CMC 3623 - Media and Society
Discusses social, cultural and political contexts in which media operates today. Analyses the role of journalism in society bringing to the forefront issues of: social change; women and media; environmental issues; reporting human rights and humanitarian issues; freedom of press; privacy; and ownership and news management, with a focus on critical issues of contemporary media landscape. Evaluates the social and technological implications on the practice of journalism due to the growth in the digital and online media.
CREDITS: 3.00

CMC 3633 - Digital Broadcasting
Develops key concepts and skills needed to report, produce and broadcast news and current affairs in the digital age, including the use of words, images and sounds to tell a newsworthy story. Examines the journalist's role in news selection and the treatment of the news stories along with the importance of journalistic ethics within emerging social and convergent media.
CREDITS: 3.00

CMC 4623 - Communication Theory
Evaluates various communication theories and how they relate to society and culture. The emphasis is on the concepts, meanings, effects and impacts of diverse forms of communication within contemporary societies. The communication processes are explored within the context of contemporary professional practice, focusing on the nature of theory and research methods along with media content.
CREDITS: 3.00

CMC 4703 - Public Relations
Builds the foundations of Public Relations by increasing the understanding of the critical role PR plays in helping organisations to succeed. Explores variations of the PR practice in different industries, reviews the history of the practice, and examines its various functions. Introduces students to best practices in PR to help them develop and maintain effective PR strategies.
CREDITS: 3.00

CMC 4713 - Media Law and Ethics
Introduces broader concepts of media laws and ethical issues in media professions including journalism, public relations, advertising and digital media. Focusing on media laws and ethics in the UAE, analyses past and developing cases to enhance students' understanding of the importance of the legal and ethical boundaries within which media professionals operate. Increases awareness about defamation and intellectual property rights, while evaluating ethical issues and moral values such as fairness, balance and bias.
CREDITS: 3.00

CMC 4806 - Final Project - Corporate and Media Communication
Integrates all the skills, competencies and knowledge students have learned in Corporate and Media Communications to accomplish a project of industry standard. Brings together professional, creative and critical approaches to conceptualise, research, plan, develop, execute and evaluate an original and independent project, which will be subjected to peer and industry review.
CREDITS: 6.00

CMM 2303 - Introduction to Media Communication
Focusing on the practice of journalism, develops core skills and competencies required by media communications professionals to research, report, edit and present news and current affairs issues across various media and platforms. With focus on regional and local news operations, enhances the understanding

of the role journalists play in providing citizens with accurate and reliable information they need to function in a free society.
CREDITS: 3.00

CMV 2303 - Introduction to Video Production
Introduces the practical elements of video production by focusing on conceptual and technical skills needed to pursue more advanced studies in video production. Applying the concepts of video camera and tripod setup, shot composition, recording both sound and video along with logging and capturing video material, and basic editing through hands-on learning experience.
CREDITS: 3.00

CMV 3503 - Editing
Introduces elementary post-production techniques and the history and theory of editing through critical analysis and discussion of selected examples. Uses industry-standard software and tools, familiarises students with the hands-on editing exercises and assigned projects, skills and post-production techniques, including sound mix and colour grading.
CREDITS: 3.00

CMV 3513 - Production Skills I
Introduces essential elements of professional video production with an emphasis on visual literacy, storyboarding, shot composition, framing and shot types. Applies the proper use of sound, appropriate selection of microphones and lighting equipment. Students create a video production (such as a P.S.A., information piece, or news item) and critique their own work and the work of others.
CREDITS: 3.00

CMV 3523 - Video Production I
Explains the elements of professional video production - with an emphasis on production procedures - by building knowledge of visual literacy. Provides a platform to apply these skills by creating a video production (such as a P.S.A., scripted scene, or news item) whereby students learn to operate a video camera, apply the proper use of sound and appropriate selection of microphones and application of lighting equipment to appropriate video scenarios.
CREDITS: 3.00

CMV 3553 - Video Production II
Employing single camera production operation develops the skills of telling a compelling story using technical and creative abilities in different phases of production. Builds competencies in understanding and applying professional practices like crew hierarchy, production procedures, budgets and realistic schedules to become a competent producer.
CREDITS: 3.00

CMV 4103 - Production Skills II
Extends video production skills with the introduction of additional creative concepts and technical skills. Fosters working in small teams in different roles, learning new skill sets, including crew hierarchy, set procedures, budgets and realistic production schedules. Enhances technical and creative abilities in different phases of production. Students produce single camera productions working as a cohesive unit.
CREDITS: 3.00

CMV 4606 - Short Video
Students collaborate on all stages of a video production, from concept to distribution of the finished project. They produce a script, become visual storytellers, guide/direct actors, and choreograph the best possible shots and camera movements for visual conveyance of their story. An emphasis is placed on storytelling in narrative format.
CREDITS: 6.00

CMV 4709 - Documentary and Video Production
Develops concepts and skills for producing, shooting, lighting, sound gathering and editing for documentary production. Enhances technical skills in operation of video equipment, set location lighting solutions, sound recording equipment and utilise editing systems to produce a cinematic documentary to convey emotion and meaning. Generates professional competencies by focusing on evaluation techniques to improve storytelling skills, creative decision-making, and creating proposals for funding a project needed to work as in the industry.
CREDITS: 9.00

CMV 4803 - Advanced Edit and Effects
Explores creative possibilities for non-linear video editing, including aesthetics, composition (both music and sound design), titles design, compositing and special effects. Analyses different approaches to editing, exploring impact on viewers . Integrates the theory of editing with hands-on experience by including a series of short practical components.
CREDITS: 3.00

CMV 4806 - Final Project - Video Production
Integrates all the skills, competencies and knowledge students have learned in Video Production to accomplish a project of industry standard. Brings

together professional, creative and critical approaches to conceptualise, research, plan, develop, execute and evaluate an original and independent project, which will be subjected to peer and industry review.
CREDITS: 6.00

COM 1003 - Digital Storytelling
Provides hands-on experience to tell a story in digital format using basic techniques and tools. Applying audio, video and text in a simple narrative structure, students develop projects to familiarise themselves with the process of digital media production. Encourages to deconstruct and critically reflect on story, coherence and production value
CREDITS: 3.00

COM 1103 - Introduction to Mass Communication
Examining the nature of the print, electronic, online and advertising media, introduces the development of mass media with focus on concepts and characteristics and applications of each media. Analyses the importance of the communication process, different types of communications, and the role mass media play in communicating messages/information to mass audiences. Explores the issues that shape the relationship between the media and society.
CREDITS: 3.00

COM 1113 - Drawing
Builds drawing and design skills, including line, shape, light and reflection, shade and shadow, perspective, rendering techniques and color theory, by applying a variety of tools and media. Focuses on core competencies to illustrate how elements of art and the principles of design can be applied creatively in different situations. Enhances knowledge of broader concepts and language of visual communication by developing proficiencies needed to enter the creative industries sector.
CREDITS: 3.00

COM 1123 - Introduction to Media Technology
Familiarises with the underlying concepts and theories of digital production, as well as practical knowledge involved in creating digital works using industry standard programmes, software, tools, techniques and practices. Develops competencies and skills in the use and application of innovative concepts and multiple tools graduates use as they pursue their media careers.
CREDITS: 3.00

COM 1133 - Visual Communication
Builds knowledge of image-based communication through intensive exploration of theoretical and practical understanding of images, pictures, symbols, signs, icons and pictograms, as well as a range of visual design elements. Covers the governing principles of arrangement and composition in still images and image sequences using industry-standard software and tools.
CREDITS: 3.00

COM 1203 - Photography
Develops conceptual and technical skills needed to function as a professional photographer working in a variety of media and platforms. Explores both analog and digital technology as students work in an experimental and critical environment to appreciate both historical developments and contemporary practice in commercial photography. Leads to the creation of a mini digital portfolio.
CREDITS: 3.00

COM 1223 - History of Media and Design
Introduces historical developments in design and how art and design movements, styles and practices, have influenced visual communication over a period of time, while focusing on the interface between media and design. Develops both historical perspectives and the visual vocabulary of media and design needed to understand rapidly changing creative industries in the region.
CREDITS: 3.00

COM 2103 - Creative Writing
Explores the basic elements of fiction writing, including character, conflict, setting, narrative and dialogue. Students read a variety of works of fiction as well as texts on writing creatively. Students develop a vocabulary for talking about how fiction works and for writing creatively. Frequent writing exercises give students the opportunity to practice and hone their creative writing skills.
CREDITS: 3.00

COM 2313 - Project Management for Media
Provides the essential knowledge of project management principles, methods, tools and techniques used in media projects. Develops a broader understanding of what constitutes a project, and the role of a project manager in project set up, execution, control, analysis and reviews. Media projects are simulated to provide authentic learning experience through the application of industry-standard tools and practices.
CREDITS: 3.00

COM 2323 - Media Education
Familiarises students with the concepts of media

literacy and increases their functional literacy so that they can access, analyse, evaluate and create media messages of all kinds using a combination of text, images and sounds. Provides the tools and skills that help to understand the role media plays in shaping, reflecting and, at times, manipulating social realities. Offers insight into media production processes and encourages critical thinking to help students navigate through complex media environments.
CREDITS: 3.00

COM 2403 - Web Development

Introduces the principles of usability and accessibility, and builds on the application of graphic design principles to the interactive environment. Students practise the fundamentals of web site design and development. Working on client-side technologies like HTML and CSS as well as giving a basic understanding of the functionality of JavaScript, students use industry standard applications for web development and site management.
CREDITS: 3.00

COM 2413 - Portfolio and Presentation Skills

Expands skills in public presentation as well as showcasing the best work to a professional standard. Presentation skills include preparation and delivery of impromptu, informative and persuasive speeches. Showcasing skills will depend on the focus of the major and could include online portfolio, printed portfolio, printed or eBook and video show-reel.
CREDITS: 3.00

COM 3513 - Media Skills in Arabic

Builds practical skills in researching, writing and presenting news reports, current affairs, interviews, and media coverage of various events in Arabic language. Develops an understanding of the news values used in the professional media environment. Illustrates standards of newspaper layout and design. Discusses general knowledge of the history of journalism and the development of all news forms through past ages.
CREDITS: 3.00

COM 4806 - Learning in the Workplace

Provides students with work experience in a professional work environment to develop their work ethics, habits and practices necessary for entering into employment. Under the mentorship of a work supervisor, students take different job roles to build competencies and skills in real work situations that enable them to put in practice the vocational skills learned at the college.
CREDITS: 6.00

CSF 3003 - Cyber Law and Ethics

Providing an insight into the laws and regulations of cyberspace, from a general understanding of the legal issues in e-commerce security and privacy, to the legal, managerial, and ethical issues affecting technology enabled organisations.
CREDITS: 3.00

CSF 3103 - Incidence Response and Disaster Recovery

Developing two threads: analysing and responding to attacks; and recovering the system from attacks or disasters. Prioritising attacks facing an organisation using a weighted analysis table. Recovering from attacks, incidents and disasters by implementing a variety of tools. Identifying system vulnerabilities, taking appropriate countermeasures, developing an incident response and recovery plan and finally implementing a disaster recovery plan to minimise downtime.
CREDITS: 3.00

CSF 3203 - Intrusion Detection and Ethical Hacking

Utilising intrusion detection techniques for the purpose of defending and securing organisational information infrastructures. Identifying methods used in computer and network hacking in order to better protect systems from such intrusions. Describing the role of a penetration tester, including what an ethical hacker can and cannot do legally. Examining different types of malicious software. Implementing hacking and tools and techniques to determine potential system vulnerabilities. Reflecting on the purpose of defending organisational and information infrastructures.
CREDITS: 3.00

CSF 3403 - Computer Forensics and Investigation

Analysing various computer systems that have been compromised. Performing a systematic investigation, recovering critical data and aiding authorities in tracking those who caused the security breach. Analysing and investigating digital evidence as related to UAE Cyber Law. Producing evidence for presentation in a UAE court of law. Analysing crime incident reports using software and hardware computer forensics tools. Recovering digital data using forensics techniques. Developing a report of the breach.
CREDITS: 3.00

CSF 3603 - Cryptography and Network Security

Introducing key concepts of encryption such as

ciphers, symmetric and asymmetric encryption. Identifying system attacks and countermeasures. Recognising the basic concepts of cryptography using various encryption techniques. Analysing public key infrastructure, digital signatures and hash functions. Applying cryptosystems to user authentication, email, IP/web security and wired and wireless networks.
CREDITS: 3.00

CSF 4003 - Security and Risk Management

Recognising Information Security from the perspective of Management. Discussing key information security management concepts and organisational roles for access, control, communication and business continuity management. Analysing methods of information security risk assessment, intellectual property protection, organisational structure assessment and modeling of critical infrastructure protection. Developing a contingency plan needed to deal with unexpected events. Implementing analytical tools for quantifying risk and the costs and benefits of various mitigation tools.
CREDITS: 3.00

CSF 4103 - Web Application and E-Commerce Security

Discovering and exploiting security flaws and major vulnerabilities inherent in web applications. Applying various tools for mapping an e-commerce web application in order to identify its vulnerabilities. Identifying tools and techniques to secure vulnerabilities in client-side controls, authentication, session management, and access controls. Initiating injection attacks, and appropriate countermeasures to test and secure web applications such as online banking and e-commerce. Applying various defense mechanisms to secure web applications against possible attacks.
CREDITS: 3.00

CSF 4203 - Telecommunications and WAN Security

Identifying different data communication and transmission techniques in telecommunication and WAN. Discussing TCP/IP and OSI protocol reference models and configuring circuit-switching and packet-switching technologies. Implementing various WAN protocols including Frame relay, ATM, MPLS and Wireless WAN. Designing and configuring WAN technologies and VPN for business data communications.
CREDITS: 3.00

CSF 4613 - Security Intelligence

Express a more developed understanding of the anomalies and suspicious activities related to Information Technology. Exploring a deep visibility into network, user, application activity, and Security Information and Event Management. Consolidating security's relevant data from various sources to perform in-depth analysis, and to investigate threats and generate reports that meet compliance and standard regulatory schemes.
CREDITS: 3.00

CTT 2003 - Principles of Learning for Instructional Technology

Identify learning theories in relation to technology-supported learning. Discuss principle theories of learning with a foundation in instructional design including learning / content management systems and their suitability to support activities based on specific learning theories. Demonstrate how specific media can be used for teaching and learning.
CREDITS: 3.00

CTT 3103 - Learning Environment Design, Support and Administration

Demonstrate management and utilisation of technology-based training practices in corporate settings. Perform selection, planning, development, administration, organisation and delivery of training to adult learners with special attention to the role of instructional technologists. Evaluate best industry practices to implement effective technology driven learning environment for organisations.
CREDITS: 3.00

CTT 3303 - Assistive Technology

Explain current philosophies, levels of support, structure, methodologies and assistive technologies required to educate learners with special needs in different learning environments. Demonstrate an overview of the learning needs of gifted learners and learners with hearing, visual, and language impairments, and intellectual and socio-emotional disabilities. Analyse the effectiveness of tools and methodologies used to address the requirements of gifted and/or special needs learners.
CREDITS: 3.00

CTT 3403 - Instructional Design for Computer-Based Training

Compare and contrast varying instructional strategies for Computer-Based Training (CBT) and select the appropriate strategy for the learning requirements. Apply principles of interface design and usability testing and address cultural needs and diversity in CBT design. Articulate factors involved with designing, developing, and implementing assessments in CBT. Analyse how to

repurpose content for different audiences, contexts, and delivery media.
CREDITS: 3.00

CTT 3503 - Human Performance Technology
Examine various methods of identifying and solving human performance problems in organisations. Discuss the foundations, process models, interventions, professional practice issues and future trends in the field of human performance technology (HPT). Explore human performance theories and application of human performance models.
CREDITS: 3.00

CTT 4003 - Distance and Online Education
Discuss modern theoretical and practical aspects of distance and online education. Evaluate the effectiveness of teaching and learning resources used in distance and online education practices using a range of available tools against specific educational and pedagogical criteria. Design and construct an e-learning site for a specified learning community using a course management system and the assessment software to produce relevant assessments for their e-learning materials.
CREDITS: 3.00

CTT 4203 - Staff Development and Corporate Training Strategies
Demonstrate knowledge, analysis and application of professional development theories and strategies for effective use of human resources. Articulate ethical and legal issues related to human resources and professional development within the workplace, organisation and community. Engage in a critical analysis of organisational, job or individual needs as it relates to the development and training of human resources in the workplace, organisation and community. Develop a training plan to address identified needs as they relate to job performance.
CREDITS: 3.00

CTT 4303 - Technology Based Assessment Design and Administration
Analyse assessment writing principles and practices in relation to different Computer-based assessment (CBA) models. Create guidelines in designing computer-based assessments using different computer-based assessment tools. Assess the quality of Computer-based assessments, its administrations, and integrity of the testing environment. Apply enhanced skills in making judgments about student learning and reporting such judgments to key stakeholders giving due attention to ethical considerations.
CREDITS: 3.00

ECE 2003 - Teaching Mathematics in the Early Years: Skills and Concept Acquisition
Develop early mathematical skills and concepts collectively known as problem solving, reasoning and numeracy, subdivided into the areas of numbers as labels and for counting, calculating and shape, space and measures. Identify contemporary thinking about pedagogy and current practice in mathematics teaching in early childhood settings with a particular emphasis on the provision of developmentally appropriate, play-based learning experiences.
CREDITS: 3.00

ECE 2203 - Learning through the Visual Arts
Identify recent thinking about creativity, and its promotion through visual arts based on UKEYFS and Reggio Emilia to affirm child-centredness. Develop skills, techniques and reflection by examining effective interventions to promote creativity and enable children to express knowledge, thoughts and feelings. Recognise opportunities to understand own creativity. Assist young children to comprehend their visual world.
CREDITS: 3.00

ECE 2503 - Theories of Teaching and Learning that impact the Preschool Curriculum
Identify key philosophies and their impact on the different curricula in early childhood (Froebel, Montessori, Dewey, Steiner Waldorf and Reggio Emilia and revisit Piaget, Bruner and Vygotsky). Critique the preschool curriculum of the UAE.
CREDITS: 3.00

ECE 2603 - Learning through the Performing Arts
Identify relative importance of the performing arts through exploration and implementation in a range of early childhood methodologies including the UK Early Years Foundation Stage (EYFS), the Montessori Method, the IB Primary Years Program (IB PYP) and in the UAE preschool syllabus.
CREDITS: 3.00

ECE 3003 - Literacies in Early Childhood
Identify a range of current approaches that facilitate the development of language and literacy skills including what are currently termed the new literacies, digital literacies or multi-literacies including digital text, images, hyperlinks and their arrangement on the page (Lankshear and Knobel, 2003). Identify processes by which children interact with a range of multiple sign systems that represent meaning in soft texts.
CREDITS: 3.00

ECE 3203 - Learning through Literature
Examine how books, poems and a range of other texts can be used to develop learning across domains with a particular emphasis on early childhood literacy. Examine 4 aspects: the historical and contemporary influence of popular culture on the development of early childhood literacy practices; the role of literature to support learning across domains; selecting and exploiting appropriate texts/ genres for young learners (with reference to UAE and cross culturally relevant content); and establishing print/ literacy-rich environments with a range of texts for various purposes.
CREDITS: 3.00

ECE 3503 - Planning and Assessment in Early Childhood Education
Review the factors, including developmental levels, individual learning needs and programme aims, that need to be considered in planning for learning across both domains (cognitive, physical, social and emotional) and curriculum areas. Define the terms "curriculum",(for example the UK EYFS), and "syllabus", (for example the seven developmental areas), examining the relationship between the two.
CREDITS: 3.00

ECE 3703 - Building Learning Communities in Early Childhood Education
Recognise family as the child's first teacher, foundation, and framework for the transmission of culture, language, attitudes and values. Analyse the stages of the family life cycle, interpersonal relationships within and outside the family and also identify the impact of context and culture on the family's ability to function effectively as an institution.
CREDITS: 3.00

ECH 1003 - General Chemistry I
Developing an understanding of, and the necessary skills to apply, the fundamental concepts of chemistry to chemical engineers. The following topics are covered: matter and measurements in chemistry; atomic theory and periodic table; naming and formulas of inorganic compounds; concepts of chemical bonding; and mass relations in chemical compounds and reactions. Classroom concepts are supported by laboratory experiments.
CREDITS: 3.00

ECH 1103 - Chemical Engineering Principles I
Developing an understanding of, and the necessary skills in, techniques of engineering calculations covering essential issues of chemical engineering principles and their applications in industry.
CREDITS: 3.00

ECH 2013 - Chemical Engineering Principles II
Developing an understanding of fundamental chemical engineering principles and their applications. Performing material and energy balances for non-reactive and chemically reactive systems used in industrial processes.
CREDITS: 3.00

ECH 2033 - Fluid Mechanics
Applying fluid mechanics principles of energy balance, determination of flow regimes, compressible flow, and fluid measurement mechanisms to solve real life problems. Demonstrating metering and pumping of fluids and relevant application to the chemical and petrochemical industry.
CREDITS: 3.00

ECH 2043 - Analytical Chemistry
Demonstrating good understanding of fundamentals and developing a practical background of classical and analytical techniques in chemistry. Performing experiments on instruments as related to modern laboratory operation and applications to industrial settings.
CREDITS: 3.00

ECH 2053 - Organic Chemistry
Developing knowledge in fundamental principles of organic chemistry such as nomenclature, structure and properties of organic molecules, isomerism, reactions and mechanisms. Synthesising simple organic compounds, performing separation and purification experiments, and identifying compounds based on their functional groups.
CREDITS: 3.00

ECH 2063 - Thermodynamics
Describing thermodynamic properties of pure substances, properties and the equations-of-state of ideal and real gases to solve thermodynamic problems. Demonstrating a good understanding of the laws of thermodynamics.
CREDITS: 3.00

ECH 2083 - General Chemistry II
Demonstrating good understanding of gases and their behaviour, thermochemistry, chemical equilibrium, solutions and their properties, and electrochemistry. Applying principles of chemistry to engineering and technology.
CREDITS: 3.00

ECH 3003 - MASS TRANSFER
Applying theories of mass transfer operations to industrial setups. Performing calculations using equilibrium stage operations, diffusion, gas absorption in packed towers, distillation and humidification. Performing laboratory exercises to illustrate the theoretical part.
CREDITS: 3.00

ECH 3013 - MATERIALS AND CORROSION
Describing the properties and corrosion behaviour of metals, alloys and non-metallic materials. Classifying corrosion types and related corrosion mechanisms. Performing laboratory exercises to reinforce theoretical concepts.
CREDITS: 3.00

ECH 3023 - CHEMICAL HEAT TRANSFER
Applying the principles of heat transfer in solids (heat conduction), forced and natural convection, and radiation. Solving problems related to heat flow and heat exchanger design. Describing the operation and design of evaporators, furnaces and boilers. Performing a series of experiments designed to reinforce the principles and developing skills for operating heat transfer equipment.
CREDITS: 3.00

ECH 3033 - ELECTRICAL FUNDAMENTALS AND INSTRUMENTATION
Develop an introductory understanding of electrical circuit theory and process instrumentation as it applies to the day-to-day operation in a Chemical and Petro-Chemical process plant.
CREDITS: 3.00

ECH 3043 - PROCESS CONTROL: CHEMICAL
Developing a good understanding of the theory and practical aspects of chemical process control. Developing outline control schemes and troubleshooting based on control related problems. Discussing conventional control methods as well as computer process control. Performing laboratory sessions to emphasise the basic principles. Examining the role and importance of process control systems and the dynamic behaviour of the process. Demonstrating and applying the concept of P, PI and PIP controllers.
CREDITS: 3.00

ECH 3053 - UNIT OPERATION I
Discussing fundamentals of separation processes used in chemical industries, such as filtration, evaporation, drying, liquid - liquid extraction and multi-component distillation.
CREDITS: 3.00

ECH 3063 - REACTION KINETICS
Describing the kinetics of chemical reactions and the design and operation of elementary chemical reactors. Detailing the principles of the kinetics of homogeneous gas and liquid phase reactions and describing the complex kinetic concepts related to chain reactions, and heterogeneous catalysis.
CREDITS: 3.00

ECH 4003 - CHEMICAL ENGINEERING DESIGN
Performing equipment design for chemical processes. Describing the overall procedure of designing a chemical process for various unit operations. Using detailed procedures to design equipment in most gas and petroleum plants. Performing mechanical design of a selected equipment.
CREDITS: 3.00

ECH 4013 - DESIGN PROJECT I
Introducing the design selection process and detail material and energy balance used for the design. Describing and applying engineering ethics common to typical work situations. Performing project tasks as team members with individual responsibilities.
CREDITS: 3.00

ECH 4023 - DESIGN PROJECT II
Implementing, evaluating, and analysing a chemical engineering project with consideration of technological, organisational, communication, and interpersonal team skills. Working in a team to apply a variety of fundamental and principle concepts gained from the programme. Demonstrating process design implementation, documentation, and presentation skills.
CREDITS: 3.00

ECH 4053 - CHEMICAL ENGINEERING SIMULATION
Showing a good command of using Simulation Software that is widely used in universities and colleges in introductory and advanced courses, especially in chemical engineering. Using simulation software in modeling and design. Using simulation software to perform lengthy calculations instantly. Making parametric analysis and other evaluations and providing a more in-depth analysis of the performance of unit operations in chemical processes.
CREDITS: 3.00

ECH 4073 - OPTIMISATION AND APPLICATION IN REFINERY
Discussing optimisation principles and linear programming techniques. Outlining general guide for problem solving in design and operation. Developing models and applying them to solve a wide range of

process engineering problems using spreadsheet software (Excel or Mathcad).
CREDITS: 3.00

ECH 4903 - Chemical Process HAZOP and Risk Analysis

Describing specific approaches and techniques which may be used to analyse, assess and manage hazards and risks in chemical process industries. Performing HAZOP and semi-quantitative studies for hazard identification and risk analysis. Discussing chemical process safety involving accident sequences, methods to eliminate sequence steps and using statistics to characterise accidents. Reinforcing the knowledge through case studies.
CREDITS: 3.00

ECH 4913 - Gas Processing

Discussing the fundamentals of the gas process operations in the petroleum industry. Describing hydrocarbon exploration methods and the conditions required for the formation and accumulation of hydrocarbon reserves. Giving an overview of gas processing from exploration up to final production and transportation. Performing calculations involving gas properties. Discussing the principles of NGL extraction, LPG fractionation and LNG production. Discussing some design aspects of the major unit process operations in gas processing.
CREDITS: 3.00

ECH 4933 - Petroleum and Petrochemical Processing

Describing the essential processing operations in a refinery where crude oil is converted into lighter fuels. Describing the properties of significant fuels, such as motor gasoline, diesel, jet fuel and heating oils. Describing the production, chemistry, and marketing aspects of some important petrochemicals. Performing relevant laboratory experiments.
CREDITS: 3.00

ECV 1003 - Applied Drafting and CAD: Civil

Apply drafting fundamentals to advanced applications of CAD in a civil engineering environment. Utilise cutting-edge technology to create CAD drawings for multiple aspects of the civil engineering construction industry. Manage multiple drawing files in a digital environment.
CREDITS: 3.00

ECV 1103 - Construction Materials

Identify the principle characteristics of key construction materials including aggregates, Portland cement, concrete, asphalt, various metals, glass and wood. Prepare and perform tests using international standards on aggregate, concrete and asphalt samples in a hands-on environment in the civil engineering workshop and laboratories.
CREDITS: 3.00

ECV 2003 - Soil Mechanics

Discuss the origin and formation of rocks and soils and evaluate the basic physical properties of soils as a material for use in civil engineering applications. Determine the engineering properties of soils through international laboratory tests performed in a hands-on environment. Apply engineering principles in the analysis of the test results.
CREDITS: 3.00

ECV 2013 - Engineering Mechanics

Apply the concepts of equilibrium, learned in physics, to determine the forces acting on static engineering structures such as beams, columns, trusses and cantilevers. Illustrate these forces graphically. Calculate key structural properties related to centroids and moments of inertia that are required for structural analysis and design.
CREDITS: 3.00

ECV 2023 - Fluid Mechanics and Hydraulics

Apply the fundamental principles of fluid mechanics and hydraulics to solve practical engineering problems related to static and dynamic fluid conditions. Explore the primary characteristics of fluids and analyse how they influence fluid behaviour. Appreciate the key concepts of fluid flow and their application to water-related design principles and practices.
CREDITS: 3.00

ECV 2033 - Strength of Materials

Utilise fundamental engineering mechanics principles and practices to determine shear force and bending moments in statically determinate structures. Assess the flexural behaviour of structural members subjected to transverse loading. Apply key concepts in a hands-on, structures-related project.
CREDITS: 3.00

ECV 2043 - Foundation Engineering

Extend the core knowledge and understanding of soil mechanics to the analysis and design of geotechnical engineering systems. Differentiate between shallow and deep foundations and their use in local, regional and international settings. Explore alternatives for retaining structures and related stability of soils in civil engineering applications such as excavations, road embankments and earth dams.
CREDITS: 3.00

ECV 2053 - Site Surveying

Recognise the need for surveying in modern society particularly for civil engineering applications related to buildings, highways, utilities and any construction activity in the built environment. Use cutting-edge, state-of-the-art surveying equipment to perform a variety of surveying activities. Produce field notes, drawings, plots and calculations to meet industry standards.
CREDITS: 3.00

ECV 2073 - Chemistry for Civil Engineering

Apply the fundamental principles of chemistry to civil engineering problems related to Portland cement and concrete, metallic corrosion and water/waste water engineering. Perform experiments to international standards and communicate findings in lab reports.
CREDITS: 3.00

ECV 3003 - Highway Engineering

Extend the core knowledge and principles of surveying to the design and construction of highways. Utilise regional and international geometric design parameters to highways for vertical and horizontal alignment, cross-sections, drawing preparation, drainage, and intersections at grade and interchanges. Emphasis is on design practices and construction procedures to achieve a highway with acceptable levels of performance in terms of safety, operation, economics and environmental concerns.
CREDITS: 3.00

ECV 3013 - Waste Water Engineering

Utilising the principles of hydraulics and a knowledge of the water cycle and precipitation hydrology, design sewer systems to international standards. Perform site visits to relevant sites to fully comprehend the importance of waste water engineering to the development and growth of world-class, large cities like Abu Dhabi and Dubai.
CREDITS: 3.00

ECV 3023 - Quantity Surveying and Estimating

Analyse the functions and responsibilities of all parties to a construction project particularly related to cost control activities. Prepare sample technical specifications and Bills of Quantities using regional and international standards. Using actual drawings and specifications determine cost estimates for the project.
CREDITS: 3.00

ECV 3033 - Structural Analysis

Apply the principles of engineering mechanics and strength of materials to the analysis of determinate and indeterminate structures. Calculate forces on beams, frames and arches. Analyse a structure for deflection under regional and international codes.
CREDITS: 3.00

ECV 3053 - Water Resources and Supply

Without drinking water to appropriate standards and in adequate amounts is paramount to the continued growth of large cities in the region. The chemical and biological challenges civil engineers face are also of magnified importance in one of the most arid regions of the world. Best practices regarding water system management are discussed at length.
CREDITS: 3.00

ECV 3063 - Concrete Design

Apply the principles and skills gained in structural analysis to the design principles of reinforced concrete structural elements. Demonstrate familiarity with Euro codes and the British Standards Code of Practice BS 8110 design and detailing work in this course. Utilise the properties of structural concrete and the influence of each of its constituents on the performance of the final product.
CREDITS: 3.00

ECV 3073 - Civil Engineering Construction

Examine topics related to civil engineering construction covering above ground and below ground projects. Review the common types of formwork, steel and precast concrete frames and causes of deterioration in concrete structures. Reflect on local, regional and international building standards and practices.
CREDITS: 3.00

ECV 3263 - Steel Design

Determine wind loads on portal frames. Given a floor-framing plan, analyse and design a simple beam with its compression flange fully restrained/unrestrained laterally. Design tension and compression members in roof trusses. Design columns subjected to pure compression and combined flexural and axial forces. Design welded and bolted connections and a base plate connection. Analyse and design a one-bay/two-bay braced and moment frames for gravity and lateral loads using software.
CREDITS: 3.00

ECV 4003 - Civil Project I

Perform all aspects of a civil engineering design project including the formation of a team to propose, plan and design a civil engineering project. Carry total responsibility for the completion of the project milestones and course objectives while working under

the mentorship of a faculty or industry engineer. The team is evaluated on its ability to coordinate efforts to propose the project design criteria, components, resources, implementation schedule, and estimated cost.
CREDITS: 3.00

ECV 4023 - Civil Project II
Perform all aspects of a civil engineering design project including the formation of a team to propose, plan and design a civil engineering project. Carry total responsibility for the completion of the project milestones and course objectives while working under the mentorship of a faculty member or industry engineer. The team is evaluated on its ability to coordinate efforts to propose the project design criteria, components, resources, implementation schedule and estimated cost.
CREDITS: 3.00

ECV 4053 - Environmental Engineering
Apply the fundamental principles of science and engineering toward environmental engineering situations, recognising it is as an interdisciplinary science. Analyse the naturally occurring environmental phenomena, industry and human induced compounds and micro-organisms, and the changes and imbalances that occur in the environment. Explore sustainability, ethics and quality of life issues.
CREDITS: 3.00

ECV 4803 - Concrete Design II
Apply the basics of design procedures, construction methods and detailing of reinforced concrete elements and structures to the design of specific concrete structural elements. Using the relevant regional or international code, design and detailing concrete footings, pile foundations, walls, shear walls, columns, beams, and slabs for reinforced concrete buildings.
CREDITS: 3.00

ECV 4813 - GIS Applications in Civil Engineering
Define the basic concepts and types of Geographic Information Systems (GIS) used in civil engineering practice. Collect and analyse data, and perform selected spatial operations. Recognise the five main components and functions of a GIS while differentiating between vector and raster methods for data capture. Students will be introduced to various GIS applications in civil engineering using appropriate software.
CREDITS: 3.00

ECV 4903 - Road Design and Construction
Analyse pavement types and the factors that impact their design with emphasis on equipment, materials and practices associated with the construction of flexible and rigid pavements. Maintenance methods including evaluation and rehabilitation are addressed. Explore the environmental impacts of construction and maintenance topics to sustainability, ethics and quality issues.
CREDITS: 3.00

ECV 4923 - Construction Contract Management
Apply the principles and procedures involved in effective administration and management of engineering contracts, from tender to final completion. Explore the legal implications of contract documents; major issues in pricing and bidding; preparation of tenders and work breakdown for bidding; reading tender documents and estimating the cost of work; initiating, negotiating and signing agreements; coordinating with General Services as per UAE procedures.
CREDITS: 3.00

ECV 4963 - Solid Waste Management
Examine the different sources of solid waste management. Investigate the important aspects of waste control legislation. Waste reduction programmes and waste recycling are investigated and strategies developed for sustainability and to protect the local and global environment. Appraise local and international approaches to handling and disposal of hazardous waste, and quality assurance measures.
CREDITS: 3.00

ECV 4973 - Research Methods in Engineering
Apply the techniques and methods of research in engineering, using qualitative and quantitative methods for decision making. Utilise a variety of research methodologies, data collection and analysis, development of theory and research verification and validation through the application of statistical analysis in research.
CREDITS: 3.00

ECV 4993 - Transportation Planning
Investigate the processes involved in facilitating the planning for future transportation facilities. Determine the factors to be considered in the planning of new transportation projects including traffic flow, safety, energy consumption, travel time, accessibility, socio-economic and environmental impacts. Create local responses to sustainability and ethical issues.
CREDITS: 3.00

EDT 2003 - Technologies for Learning I
Identify current educational theory and practice about learning technologies, and how they can be used to

enhance teaching and learning in schools, tertiary institutions and other learning environments such as the workplace.
CREDITS: 3.00

EDT 2203 - Information, Communication and Media Studies

Explore key components of media literacy which is an essential component of global citizenship in todays mediated world. Analyse the impact of the media on people's lives and how the media can serve as a highly motivating resource for teaching. Research a topic related to media and education, demonstrating an understanding of the issues.
CREDITS: 3.00

EDT 2503 - Technologies for Learning II

Explore, build on and extend knowledge, skills and understanding of current educational theory and practice related to computer-based learning technologies that were introduced and developed in Technologies for Learning I. Apply knowledge to the teaching and learning environment through the delivery of a learning activity.
CREDITS: 3.00

EDT 2703 - Distance and Online Education

Develop a sophisticated understanding of current educational theory and practice related to learning technologies in distance and online education. Explore and develop practical applications of distance and online education technology tools. Explore and debate current issues in distance and online education.
CREDITS: 3.00

EDT 3003 - Computer Platforms

Explore the basics of network operating systems, network operating system components, operating system installation, and device drivers and configuration. Develop knowledge of how to install and configure an operating system in a work group and domain environment. Develop an understanding of the basics of desktop, laptop, mobile and network hardware, system administration, resource permissions, and become familiar with planning, creating and managing user and group accounts.
CREDITS: 3.00

EDT 3203 - Computer-Based Training

Understand the skills needed to develop computer and web-based training courseware, and explore computer and web-based instructional teaching and learning theories and strategies. Understand the basic elements of computer and web-based system courseware and develop skills in designing and delivering computer-based training.
CREDITS: 3.00

EDT 3503 - Web Design for Learning

Explore current/contemporary web development technology, with a focus on designing and building dynamic, database driven web sites appropriate for use in educational settings. Develop a sophisticated understanding of the role of Internet technology in present day educational settings, with particular attention to the development of Inter/Intranet applications.
CREDITS: 3.00

EDT 3703 - Multimedia Authouring for Learning

Develop a sophisticated understanding of the principles, best practices and techniques used for creating successful multimedia applications. Explore, develop and design specifications for multimedia applications in an educational context, including storyboards, flow-models and mock-ups.
CREDITS: 3.00

EDU 1003 - Introduction to Theories of Learning 1a

Explore theories of child development to gain an initial understanding of the significant influence of these approaches on teaching and learning. Examine the development of children from birth to the end of primary school age by investigating the domains of cognitive, linguistic, physical, social, emotional and moral development.
CREDITS: 3.00

EDU 1203 - Learning to Teach in the Contemporary UAE 1a

Explore the broad role of the teacher/educator, the student and the culture of the classroom/learning environment in an introductory and non-threatening manner. This will be achieved either by direct experience (observation) in relevant institutions or though viewing videos of best practice, and through input sessions at college during the semester.
CREDITS: 3.00

EDU 1303 - Learning Technologies for the Classroom

Develop an introductory understanding of computer hardware, software, and web-based learning technologies that can be used in teaching and learning. Explore the fundamental elements of ICT for learning environments and its underlying pedagogy, educational issues relating to the use of technology in the classroom, the significance of technologies, their

impact on society, and how society has changed as a result of them.
CREDITS: 3.00

EDU 1503 - Introduction to Theories of Learning 1B

Develop a more sophisticated understanding of theories of child development and how they influence the approaches to teaching and learning that were introduced in semester one. Explore the development of the older child by investigating the domains of cognitive, linguistic, motor, social, artistic and emotional development and their influence on motivation and learner behaviour.
CREDITS: 3.00

EDU 1703 - Learning to Teach in the Contemporary UAE 1B

Develop an understanding of the broad role of the teacher, students and the culture of the learning environment, through direct experience in relevant institutions, and input sessions at college. The themes of the course closely relate to educational and practicum subjects. Explore and critically reflect on the application of a range of methodologies including Gardner's theory of multiple intelligences, Bloom's taxonomy and other contemporary theories.
CREDITS: 3.00

EDU 1803 - Introduction to Math and Science in the Classroom

Develop an understanding of the process of enquiry through the application of naturalistic, informal and structured concepts. Apply these to activities that support the development of a range of fundamental mathematical and scientific concepts and skills. Create activities that engage children in mathematical and scientific enquiry.
CREDITS: 3.00

EDU 2113 - English for Classroom Management

Focus on the language needed by English teachers as they manage the learning process. Through microteaching scenarios, explore a mixture of tasks designed to simulate classroom teaching, such as producing clear, level-appropriate and linguistically accurate spoken classroom instructions, rewriting texts to make them more accessible to lower level learners, and demonstrating competence in handling routine pedagogical interchanges in the classroom.
CREDITS: 3.00

EDU 2303 - Language and Development: SLA Principles and Pedagogy

Obtain an overview of key theories of children's acquisition of English (FLA) and consider the contrast with how Second Language Acquisition occurs. Explore the nature of learner language, and variability and gain important practical insights for teaching and learner language development from learner errors.
CREDITS: 3.00

EDU 2803 - Teaching Learners with Special Needs

Develop a basic understanding of the current philosophies, structure, levels of support, methodologies and assistive technologies required to educate students with special needs in different learning environments.
CREDITS: 3.00

EDU 3003 - Global Education and Leadership

Learn about the concepts, values, skills, qualities and understanding about leaders and leadership. Develop the analytical, inspirational, persuasive, metacognitive, and critical and creative thinking skills required in an ethical leader as well as practice applying these skills in simulations and team-based practical activities that support reflection and self-discovery.
CREDITS: 3.00

EDU 3033 - English for Academic Purposes

Focus on the development of academic reading, writing, listening and speaking skills. Examine and interpret a broad range of articles, reports, and academic texts, as well as demonstrate understanding of extended speech on a range of general topics at natural speeds. Create short reports and expository texts such as discussion essays, and demonstrate an ability to take an active part in discussions, while demonstrating a solid understanding of grammar and an ability to understand the multiple meanings of a broad range of words in specific contexts.
CREDITS: 3.00

EDU 4003 - Research Methods and Reflective Practice in Education

Explore fundamental reflective practice informed by action research principles. Apply this knowledge to the creation of an authentic preliminary investigation into a researchable issue, culminating in an action plan that will be implemented in the following semester as part of a complete reflective practice project. Examine various elements of reflective practice with a focus on qualitative action research methodology.
CREDITS: 3.00

EDU 4103 - Managing Innovation and Change in Education

Develop an awareness of the overall organisational and management structure of the UAE government

education system as it impacts on the early childhood/ school education sector, relating this to relevant theory.
CREDITS: 3.00

EDU 4203 - CURRICULUM DESIGN

Examine the principles and dynamic nature of curriculum through an investigation of definitions of curriculum, evaluation of curriculum and learning outcomes, and differences between syllabus and curriculum. From this examination, evaluate curriculums and design a syllabus to match their learning contexts.
CREDITS: 3.00

EDU 4503 - RESEARCH PROJECT

Develop a sophisticated understanding of action research. Implement the reflective action plan developed in the previous semester based on action research principles, culminating in a reflective action research report.
CREDITS: 3.00

EDU 4603 - EMPLOYMENT PREPARATION FOR NEW UAE EDUCATORS

Explore how to prepare for future roles in an educational context in the UAE by developing an awareness of the various aspects and current trends of these educational contexts and apply this understanding to addressing their own preparation. Gain self awareness, career knowledge and exploration, employable skills and practical preparation for working after graduation.
CREDITS: 3.00

EEC 1003 - ELECTRIC CIRCUITS I

DC fundamentals, which include basic quantities, common engineering scaled units, Ohm's law, power dissipation, Kirchhoff's laws, and linear circuit theorems, such as Thevenvin equivalence, Norton equivalence, and superposition, are applied to linear circuits. Network analyses of series, parallel, and series-parallel linear circuits with various sources and the description of fundamental energy storage components are included. Circuit simulation and practical laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEC 2003 - ELECTRIC CIRCUITS II

The transient and steady state analyses are determined for RC, RL, and RLC linear reactive circuits with a sinusoidal source. The steady state response and power dissipation are analysed for a reactive load and the maximum load transfer is determined. Low pass, high pass, band pass, and band stop first order filters are analysed and terminal equations are used to describe resistive, two port circuits. Circuit simulation and practical laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEC 2013 - DIGITAL CIRCUITS

Fundamental concepts of digital systems include: numbering systems; digital codes; logic symbols; Boolean expressions; logic minimisation techniques; analysis of combinational and sequential circuits; and classification of various integrated circuit (IC) families. Sequential logic circuits are analysed using logic symbols, truth tables, and associated timing diagrams. The operational characteristics and applications of various digital IC families are described. Practical laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEC 2033 - MICROCONTROLLER SYSTEMS

The hardware and software architecture of a typical microcontroller system is described and used as a basis for the implementation of developed programmes. Top-down design is applied to the microcontroller system to implement solutions using on-chip timers, peripherals, and various modules for a selected range of applications. Circuit simulation and practical laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEC 2053 - ELECTRONICS I

The construction and operation of a semiconductor diode is described and used in various, common and practical applications. The construction, operation, characteristics, and common applications of the bipolar junction transistor (BJT), JET, MOSFET, and IGBT are analysed theoretically and practically in a laboratory setting. Circuit simulation is also used to reinforce concepts.
CREDITS: 3.00

EEC2073 - ELECTRICAL ENGINEERING FUNDAMENTALS

Fundamental concepts of electrical engineering include identifying basic electrical quantities and common scales relative to current, voltage, resistance and power. The construction, value and voltage-current characteristics of common passive components are described and Ohm's law is investigated by using laboratory equipment to measure voltage, current, and power of series, parallel, and series-parallel DC circuits. Kirchhoff's voltage and current laws are used to analyse DC circuits and AC signals are generated in the laboratory and measured in RC, RL, and RLC circuits, with a focus on amplitude and phase. The construction and operation of semiconductors are described.
CREDITS: 3.00

EEC 3003 - INSTRUMENTATION AND CONTROL

Instrumentation and process control topics are described and the difference between open and closed loop control systems is explained in terms of set point, output, feedback, and error. The appropriate transducer

is selected, applied, and calibrated for measurement of temperature, flow, pressure, position, level, rotation speed and torque. The appropriate actuator is selected and applied for the control of temperature, flow, pressure, level, and rotation. Various on/off and PID closed loop control systems are described and analysed through simulation and practical laboratories.
CREDITS: 3.00

EEC 3013 - Electronics II
The fundamental analysis and design of analog amplifier circuits are implemented for various electronic applications. Specifically, the frequency response of single and multistage amplifiers is determined, with consideration of noise. The properties of A, B, AB, and C power amplifiers is determined and low pass, high pass, band pass, and band stop active filtered are designed. The operation of RC feedback, LC feedback, and relaxation oscillators is described and analysed. Circuit simulation and practical laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEC 3043 - Communication Systems
The fundamental components of an analog communication system are described by use of block diagram. Course topics include analog modulation and demodulation techniques used in transmitters and receivers, respectively, and propagation characteristics of the transmission channel. Circuit simulation and laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEC 3073 - Signals and Systems
Time and frequency domain representation of fundamental, continuous and discrete time signals and systems are analysed. Topics include fundamental signals and operations, system properties, representation of linear time-invariant systems, continuous-time Fourier analysis, Laplace transform analysis, discrete-time Fourier analysis and the application of the Z transform to analyse digital systems. MATLAB is used to simulate, implement, and analyse signals and systems accordingly.
CREDITS: 3.00

EEC 3103 - Digital Communications
The fundamental operational principles of digital communication systems are discussed. Topics include digital transmission, use of available bandwidth, line coding, PCM, delta modulation techniques and transmission modes. Digital modulation techniques, multiplexing and transmission media are described as well as error detection and correction coding techniques. Satellite and fibre optic communication systems are described as practical applications. Circuit simulation and laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEC 3503 - Embedded System Design
The specification, design, development, and testing of real-time embedded microcontroller systems are practically implemented. Various architectures, real-time programming, and interface of common peripheral devices are analysed in a theoretical but descriptive form through sample applications. Students apply learned skills and techniques in a laboratory setting.
CREDITS: 3.00

EEC 4013 - Data Communications and Networks
The fields of data transmission, networks, and protocols are applied to industrial applications. Topics include common terminology used in data transmission, codes and modes. For a given data communication system, the channel capacity, transmission media and multiplexing are determined. The underlying LAN topologies, OSI model, elements of the Internet network, and various protocols, such as Modbus, Fieldbus, and Ethernet implementations are discussed in relation to industrial applications.
CREDITS: 3.00

EEC 4033 - Programmable Devices
Programmable devices are used to implement digital circuits. The programmable logic device (PLD) and field-programmable gate array (FGPA) are presented as integrated circuits used to implement combinational and sequential logic circuits. Advantages, cost, programming and reliability are discussed for each type of device. Students use the FPGA prototyping boards to design, develop, synthesise, implement, test, and debug FPGA design project in accordance with a provided specification.
CREDITS: 3.00

EEC 4043 - Control Systems
Modelling and simulation are used to analyse, augment, and improve the performance of analogue single-input single-output LTI control systems for a variety of applications. Typical control systems are modelled by a transfer function and various frequency response methods are used to determine and assess the system response and stability. MATLAB is used in the design and analysis of various compensators. Basic digital control systems and related properties are described.
CREDITS: 3.00

EEC 4053 - VLSI DESIGN

The design, simulation, and fabrication of CMOS very large scale integration (VLSI) digital circuits are introduced through the fabrication and layout of basic digital circuits (Inverter, NAND and NOR gates). The VLSI technology scaling at both the transistor and the interconnects level is reviewed. The time delay and power dissipation are calculated, through simulation of basic digital circuits, such as full adders and n-bit multipliers. State-of-the-art CAD tools are used for design in accordance with fabrication specifications and performance targets through simulation.
CREDITS: 3.00

EEC 4943 - MOBILE COMMUNICATIONS

The field of mobile cellular communications is presented through discussion of key concepts such as: architecture; cell design; frequency reuse; handoff; interference and capacity; and grade of service (GoS). Propagation radio channel which limits the performance of mobile communication is addressed. A study of digital modulation and its performance over fading channels is covered. Multiple access schemes such as TDMA, FDMA, CDMA and spread spectrum systems are presented. Wireless standards and future development are considered in detail.
CREDITS: 3.00

EEC 4963 - DIGITAL SIGNAL PROCESSING

A practical understanding of the fundamentals of digital signal processing is gained through analysis of the time, amplitude, and frequency effects of sampling and digitising continuous-time signals. The Z-transform and signal flow diagrams are used in the design of various FIR and IIR filter specifications. MATLAB is used to implement and analyse the frequency response. Circuit simulation is utilised to reinforce concepts.
CREDITS: 3.00

EEC 4983 - DIGITAL CONTROL SYSTEMS

Presents topics related to digital control systems and includes the components of computer control systems, design and analysis of digital controllers, and typical industrial applications with a distributed control system. The course includes realisation of digital control systems, distributed control system architecture, and practical implementation of a simple distributed control system.
CREDITS: 3.00

EEC 4993 - INTELLIGENT SYSTEMS

Artificial intelligence (AI) and related system techniques are discussed and implemented in various applications. Basic AI topics of knowledge representation, search techniques, and reasoning are presented. Concepts and methods used in fuzzy sets and systems are discussed and fuzzy practical applications are identified. The biological origins of artificial neural networks and genetic algorithms are described and implemented in practical applications.
CREDITS: 3.00

EEL 2003 - POWER ELECTRONICS

The characteristics and operation of electronic power devices, firing circuits, and driving circuits for power converters are described and implemented practically in the laboratory. Uncontrolled and controlled, single phase rectifiers are used in various electrical power applications. DC to DC power conversion circuits are investigated. Circuit simulation and practical laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEL 2023 - POWER GENERATION AND TRANSMISSION

The layout, main components, and characteristics of common electrical power generation plants are described with application to various thermal power plants. The power transmission process, from generation to distribution is described and expressions for resistance, inductance and capacitance of high-voltage power transmission lines are developed used to determine the equivalent circuit of a three-phase transmission line.
CREDITS: 3.00

EEL 2043 - PRINCIPLES OF MACHINES AND POWER

The fundamentals of common electrical machines used are analysed through industrial applications. Three-phase electrical circuits are analysed as well as the operation of single-phase and three-phase electrical transformers. The steady state operation of DC machines and stepper motors is analysed and the performance characteristics of single and three- phase induction motors are discussed. Practical laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEL 3003 - ELECTRICAL MACHINES

The construction, operation and testing of three-phase electrical machines are presented. The physical concepts and basic laws governing electrical machines operation, such as Faraday's Law, Ampere-Biot-Savart's Law and Len's Law, are introduced and the principles underlying the performance of three-phase electrical machines are subsequently explained. Practical laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEL 3013 - ELECTRICAL POWER DISTRIBUTION

The fundamentals of electrical power distribution are

applied to various distribution system layouts and the function of common distribution system substations and equipment. Students are introduced to the design procedures and protection methods for power distribution systems of consumer installations. Circuit simulation and practical laboratories are utilised to reinforce concepts.
CREDITS: 3.00

EEL 3023 - System Protection and Coordination
Power system protection fundamentals, basic design requirements, and principles of operation for over-current, over-voltage, and under-voltage protection schemes for various power system components are described. Three-phase short circuit currents are analysed under various conditions and are used as a basis to select circuit breaker types and ratings. Various protective devices, such as over current and earth leakage, differential, distance, over voltage, and under voltage relays, are applied as appropriate. Unit protection, back up protection, and protection coordination are introduced.
CREDITS: 3.00

EEL 4413 - Power Systems Analysis
The ability to analyse and solve problems commonly encountered in electrical power systems is essential for quality power systems. A revision of complex power calculations, per-unit system of analysis, and electrical network calculations is included, and topics related to system modelling, load flow analysis, symmetrical components theory, fault analysis, and stability problems.
CREDITS: 3.00

EEL 4803 - Electrical Drives
The theory and control methods for DC and AC electrical drive systems are applied in a laboratory setting. Various methods for controlling the DC and AC motors are presented and mathematical models are used to implement linear control techniques. Various implementations and designs are modeled with the associated control mechanisms using a simulation package, such as MATLAB Simulink, in order to Investigate and test the overall DC and AC drive system performance under various operating conditions.
CREDITS: 3.00

EEL 4813 - Electrical Maintenance Operations
The preventive, corrective and opportunistic maintenance and testing of electrical equipment and subsystems including substations, circuit breakers, power transformers, and industrial machines are essential for quality power systems. The Electrical Preventive Maintenance and Test (EPMT) programme is introduced and utilised, with consideration of electrical safety, switching practices and precautions taken with live circuits. Maintenance options with respect to economic considerations and cost-benefit analysis are also explored.
CREDITS: 3.00

EEL 4903 - Machine Control and Drives
The fundamental physical, electrical and mechanical properties of DC and AC motors are the basis for understanding the design and control strategies for motor drive systems in industrial settings. The relative merits of various AC inverter circuits for reliable and efficient operation of AC drives are applied to a range of industrial applications. Mathematical modelling and software analysis packages are used extensively.
CREDITS: 3.00

EEL 4993 - Advanced Power Electronics
AC-AC and DC-AC power conversions circuits are used in various industrial applications. Advanced power electronics circuits topologies include PWM rectifiers, multi-level and matrix converters. Moreover, the effect on power quality is determined and mitigation methods are discussed. Power electronics circuits used in industrial applications are constructed in a laboratory setting.
CREDITS: 3.00

EGN 1103 - Engineering Measurements and CAD Introduction
Identify and implement workshop health, safety and accident prevention procedures and practices. Measure mechanical and electrical quantities with consideration of measurement accuracy, resolution, significant digits, and tolerance. Identify and implement common methods of fastening and joining engineering materials to build a device. Apply drafting and CAD basics to prepare basic drawings of engineering components and relevant engineering applications.
CREDITS: 3.00

EGN 2003 - Computer Programming
Use algorithms, pseudocode, and flowcharts in the design process of computer programmes. High level programming languages consist of primitive data types, operators, flow control, looping structures, error handling, functions, and array data structures, which may be used in the implementation of properly documented programmes for engineering technology solutions.
CREDITS: 3.00

EGN 3033 - Heat Transfer
Study the basic physical laws of heat transfer including

steady-state and transient heat flow, one-dimensional heat conduction in solids, free or forced convection in fluids, radiation and phase change and analysis of heat exchangers. Understand engineering applications involving heat transfer in the design or selection of pumps, heat exchangers and building insulation materials.
CREDITS: 3.00

EGN 3103 - Project Management

Describe the project management life cycle and discuss stakeholder impact. Develop a project work breakdown structure, define and identify major activities in each project phase, and describe team member roles, responsibilities, and authority. Schedule multiple projects, minimise resource conflicts and use a scheduling software tool to manage projects individually and together. Develop a resource plan with effective cost estimate, budgeting, control, and reporting. Assess and plan for project risk mitigation and auditing. Discuss resource allocation and apply to an engineering project.
CREDITS: 3.00

EGN 3203 - Engineering Economics

Apply the basics of economic analysis for quantifying engineering business decisions. Recognise the importance of: the time value of money; analysis of single and multiple investments; comparison of alternatives; capital recovery and tax implications. Advanced analysis of certainty; uncertainty; risk analysis; public sector analysis and break-even concepts related to engineering projects. Demonstrate competency in key economic analysis using hands-on tools like case studies.
CREDITS: 3.00

EGN 3313 - Engineering Practice and Leadership

Explore the components of professional practice, ethical decision making, and leadership in relation to engineering technology. Recognise how organisational structure and behaviour in an international context, improve the engineer's ability to consider problems from multiple perspectives and make decisions associated with ethics, context, and uncertain, inconsistent, and imprecisely defined requirements.
CREDITS: 3.00

EGN 3333 - Health, Safety and Environment

Understand and describe common industrial procedures for employee health, safety and environment. The course covers the identification and control of hazards, occupational health, fire protection and prevention, safety management and ethics, safety regulations, safety inspection, accident investigation, personal protective equipment, and safety report documentation. Discuss environment protection, accident prevention, effective committee operations, accident investigation, and safety training.
CREDITS: 3.00

EGN 4003 - Design Project I

Within a team, propose, design, and plan a capstone engineering project. Though mentored by a faculty member, the team is evaluated on its ability to coordinate efforts to propose the project design criteria, major components, resources, systematic design, implementation schedule, and estimated cost.
CREDITS: 3.00

EGN 4023 - Programmable Logic Controllers

The Programmable Logic Controller (PLC) has many applications in industrial control systems. The PLC system structure is described in terms of hardware and components and programmed using ladder logic and device wiring techniques. The PLC, timer, and counter instructions are used to safely control simple systems in the laboratory. Systematic faultfinding and debugging techniques are used to implement an industry related application.
CREDITS: 3.00

EGN 4033 - Design Project II

Implement, evaluate, and analyse the capstone engineering project formerly proposed with Design Project I. Though guided by faculty, the student team is primarily responsible for the completion of the project milestones and course objectives. Integrate and apply technological, organisational, communication, and interpersonal skills. Safe implementation, documentation, and presentation skills form the basis for assessment.
CREDITS: 3.00

EGN 4813 - Robotics Technology

Robotic technology involves mechanical components, transducers, and actuators of a computer automated process. Specifically, a hands-on approach is used to explore robotic embedded systems, associated programming, dedicated controllers, and related applications. The fundamental concepts describing robotics operation including coordinate transformations, sensor and actuator selection and interface, motion analysis, path planning and kinematics are introduced.
CREDITS: 3.00

EGN 4823 - Industrial Problem Solving

utilises an industry-based project as a practical means

of researching a specific engineering technology problem by technically describing the project, determining the design criteria, innovating possible proposals, assessing proposals in consideration of the design criteria, evaluating the best solution, resolving implementation issues, and confirming the expected performance results. The process is documented by logbook entries and various reports and presentation.
CREDITS: 3.00

EGN 4913 - Renewable Energy Systems

Renewable energy sources and systems for conversion of various forms of energy into electrical power are essential for sustainable systems. Common energy sources such as wind, solar, nuclear, fuel cell, hydro, biomass and geothermal are described by operational principles, block diagrams and construction. This course also introduces factors affecting generation, efficiency and integration of power sources to the grid from wind and solar-based energy systems.
CREDITS: 3.00

EGN 4923 - Engineering Design

Analyse, design and select engineering components and materials. Apply systematic conceptual design, embodiment design and design process techniques and implement them in real life practical design problems. Perform cost estimate and cost analysis in design. Execute what is learnt to complete the design of an engineering product or system.
CREDITS: 3.00

ELT 2003 - Language Arts A (Speaking, Listening and Vocabulary)

Explore and build on the knowledge and awareness of how language impacts learning and how young children acquire and learn in a second or additional language. Apply significant international models of learning and teaching while examining approaches to the teaching of Speaking and Listening to EFL learners during teaching practice.
CREDITS: 3.00

ELT 2203 - Language Arts B (Teaching Methods for the Primary School Teacher A)

Explore appropriate methods and strategies for the effective, integrated delivery of Language Arts in a primary classroom. Identify and evaluate a variety of international models for teaching the principles, concepts and skills of English. Consider the implications for integrated content delivery in schools. Explore how to select an appropriate method suitable for the particular aspect of language being taught.
CREDITS: 3.00

ELT 2503 - Language Arts C (Reading/Writing/Literature)

Develop an appreciation of children's literature and its fundamental role in promoting literacy in primary schools. Develop an understanding of the basic structure of a story and the basic literary genres, and examine their appropriateness for the UAE context. Explore how to develop the ability to deliver fluent and engaging story time sessions.
CREDITS: 3.00

ELT 2603 - Language Arts D (Teaching Methods for the Primary School Teacher)

Explore and apply appropriate methods and strategies for the effective, integrated delivery of Language Arts teaching of reading in an English medium primary classroom.
CREDITS: 3.00

ELT 3003 - Child and Adolescent Literature

Develop student's awareness of the value of adolescent literature as a tool in language teaching. Explore theoretical foundations for the use of literature in the classroom. Develop a bank of classroom applications for the teaching of English as a Second Language (ESL). Publish and share resources and materials.
CREDITS: 3.00

ELT 3203 - Language Arts E (Teaching Methods for Secondary School English)

Develop a sophisticated understanding of the teaching of reading in UAE schools. Review and solidify understanding of the complex nature of reading. Deliver a staged reading lesson that prepares, monitors and extends the reader's comprehension through both top-down and bottom-up strategies. Demonstrate basic vocabulary teaching strategies and methods to assess reading comprehension.
CREDITS: 3.00

ELT 3503 - Literacy and Grammar in the Second Language Curriculum

Develop understanding of knowledge of the language as an essential tool for English language teachers. Raise awareness of grammar and language used while teaching, and build on existing knowledge. Analyse grammatical functions and structures in terms of form and use.
CREDITS: 3.00

ELT 3703 - Language Arts F (Teaching Methods for the Secondary School English)

Explore and build on knowledge of literacy development by examining the teaching and learning

of writing while considering how to plan for these in the second language curriculum. Examine the complex skills involved in writing, before moving on to analyse a range of approaches and strategies that can be used to teach writing in secondary schools.
CREDITS: 3.00

EMC 2003 - Computer Aided Drafting

Understand the fundamentals of 2D and 3D computer aided drafting software for mechanical engineering applications. Apply drawing standards, design layout, drawing notes, dimensioning, drawing scales, tolerances, geometric modeling and assign these to an engineering drawing in AutoCAD. Create engineering drawings in orthographic, sectional and auxiliary views. Combine these new skills to produce assembly drawings and first/third angle projections.
CREDITS: 3.00

EMC 2013 - Materials Selection and Testing

Apply material selection criteria for specific engineering applications through the understanding and identification of materials, their mechanical properties and material defects. Explain atomic bonding, structure, imperfections, grain-size and re-crystallization and describe material failure and causes of corrosion with prevention methods.
CREDITS: 3.00

EMC 2023 - Statics and Dynamics

Understand the fundamentals of statics for particles and rigid bodies and the principles of dynamics with engineering applications. Use this understanding to analyse and solve problems in planar equilibrium, forces in structural members and problems in kinematics and kinetics for particles and rigid bodies.
CREDITS: 3.00

EMC 2033 - Manufacturing Technology

Develop an understanding in the processes and technologies relative to manufacturing technology. Distinguish between primary and secondary manufacturing processes. Identify relevant design factors when selecting a manufacturing process and apply the methodology for a given component. Compare measurement systems, quality control of manufactured parts and technologies associated with Advanced Manufacturing Technology (AMT).
CREDITS: 3.00

EMC 2043 - Mechanics of Materials

Understand, analyse and determine stress, strain, deformation, strain energy and load carrying capacity of structural members subjected to tension, compression, shear, torsion, bending and stress-strain transformation. Interpret engineering design concepts that are integrated into the course and conduct and analyse related laboratory experiments.
CREDITS: 3.00

EMC 2053 - Fluid Mechanics

Explain fluid properties, pressure and its measurement for an incompressible fluid. Calculate hydrostatic forces and hydrodynamics through the understanding of buoyancy, forces on submerged surfaces, pipe flow and energy losses. Conduct and analyse practical work through a set of experiments in the hydraulics laboratory to reinforce the theory.
CREDITS: 3.00

EMC 2223 - Fluid Power

Understand the principles of fluid power and components through the application of circuit design. Apply the concepts of pressure, flow, power and efficiency, in hydraulic and pneumatic systems to solve typical problems for a given application. Design, prove and troubleshoot fluid power circuits using pneumatic and hydraulic trainers.
CREDITS: 3.00

EMC 3003 - Industrial Plant Maintenance

Understand and analyse methods of achieving good organisational and maintenance planning in industrial settings including benchmarking fundamentals, maintenance training, preventive maintenance, condition monitoring, maintenance inventory and purchasing and management reporting. Understand integration and benchmarking best practices in maintenance management and assess world-class maintenance management examples.
CREDITS: 3.00

EMC 3013 - Fabrication and Welding

Understand health, safety and environment regulations for common welding practices. Apply basic fabrication and welding skills using selected thermal processes such as the Oxy-Acetylene (Gas Welding), Manual Metal Arc (MMA), Metal Inert Gas (MIG) and Tungsten Inert Gas (TIG) welding. Conduct basic quality control check for the finished products.
CREDITS: 3.00

EMC 3023 - Thermodynamics I

Understand the first law of thermodynamics using heat transfer mechanisms, forms of mechanical work and the balance of energy; and apply to non-flow processes (closed systems) and flow processes (open systems). Determine thermos-physical properties of

pure substances and ideal gases. Apply the second law of thermodynamics for thermal cycles.
CREDITS: 3.00

EMC 3053 - Thermodynamics II
Apply the laws of thermodynamics in the design and optimisation of basic energy conversion processes within various power plants. Analyse fundamental thermodynamic properties including cycle efficiency.
CREDITS: 3.00

EMC 3063 - Mechanical Design I
Describe and categorise concepts and functions of various common machine elements including types of loading, flexible power transmission systems, keys and couplings, shafts, fasteners, welded joints and springs. Apply data and decision analysis techniques necessary to design these elements commonly found in mechanical devices and systems.
CREDITS: 3.00

EMC 3163 - Process Control: Mechanical
Understand and define basic concepts of automatic process control theory, and apply of these concepts in modern industrial applications. Design, build and simulate feedback control and feedforward control systems, and variations and extensions of these to more special purpose concepts and applications found in common practice.
CREDITS: 3.00

EMC 4003 - Turbomachinery
Understand the concepts, procedures, data and dimensional analysis techniques necessary to evaluate the flow and energy transfer through various types of turbo machines. Building upon knowledge gained from various engineering topics, develop skills to analyse the energy transfer that is taking place between a fluid and a rotating element due to dynamic action.
CREDITS: 3.00

EMC 4043 - Refrigeration and Air-Conditioning System
Classify refrigeration and air-conditioning systems and their applications in industry. Analyse air conditioning processes and psychrometrics to determine the properties of moist air. Understand and apply cooling loads estimations and analyse vapour compression refrigeration cycles, components, and systems. Conduct lab experiments and demonstrations to support key concepts with practical examples and applications.
CREDITS: 3.00

EMC 4123 - Gas Turbines
Explain the thermodynamic concepts, construction, operation and applications of gas turbines and analyse gas turbine cycles including basic and modified gas turbine cycles and combustion systems. Understand power plant efficiency and output enhancements. Identify and describe environmental issues and analyse the economics of gas turbine plants.
CREDITS: 3.00

EMC 4143 - Production Planning and Control (PPC)
Understand the design, development, implementation and management of production planning systems. Identify elements, processes and technologies comprising the field of Manufacturing Planning and Control (MPC). Construct an Enterprise Resource Plan (ERP) to support MPS decisions and recognise implementation issues in MPC systems, supply chain optimisation, integration, transformation and benchmarking.
CREDITS: 3.00

EMC 4923 - Desalination and Power
Understand power and desalination principles, technology and applications to explain the benefits behind using cogeneration technology in power generation and desalination plants. Analyse various power generation systems such as steam generators and gas turbines using thermodynamic principles. Describe the thermal and membrane desalination processes for fresh water production.
CREDITS: 3.00

EMC 4963 - Power Plant Engineering
Develop the necessary knowledge and understanding of power plant technology used in the generation of electrical power. Understand and explain basic power plant components, operations, economics, design and performance. Analyse thermodynamic and power plant cycles, fossil and nuclear fuels, fuel combustion; power plant economic and environmental aspects; electrical equipment; nuclear power and emerging energy source technologies.
CREDITS: 3.00

EMC 4973 - Computer Integrated Manufacturing
Understand and appreciate the technologies associated with computer integrated manufacturing (CIM) including computer-aided design (CAD), automated manufacturing processes and integrated manufacturing. Design and manufacture components using advanced CAD software and Computer Aided Manufacturing processes.
CREDITS: 3.00

EMM 4103 - TOTAL QUALITY MANAGEMENT IN AVIATION

Total Quality Management (TQM) consists of organisation-wide efforts to install and make permanent a climate in which an organisation continuously improves its ability to deliver high-quality products and services to customers. Students will be able to critically appraise quality management techniques, make recommendations for improving processes and write reports to management. Tools and techniques such as statistical process control SPC, Quality systems, Quality management ethics, ISO, Continual improvement methods and implementation of Total Quality Management will be explored with questions, debate and examples. QMS and SMS in a CAR 145 organisation along with regulations and audit requirements are discussed.
CREDITS: 3.00

EMM 4203 - AVIATION OPERATIONS MANAGEMENT

Aviation Operation Management explores the roles and responsibilities of management personnel in relation to airport, airline and ancillary business management. The course covers key concept areas such as: Health, Safety and Security for Aviation; Airline Business Management; Airport Business Management; Aviation Financial Management; and Work-based Learning. The course also focuses on the facilities that comprise an airport system, including airspace, airside field, terminal side and ground handling operations.
CREDITS: 3.00

EMM 4303 - AVIATION PROJECT MANAGEMENT

Aviation Project Management covers a range of principles and practices for initiating, planning, staffing, coordinating and completing a project within the triple constraints of schedule, budget and performance. The course strives to strike a balance between the general knowledge of project management and the currently available computer based tools to assist in managing projects in a contemporary aviation environment.
CREDITS: 3.00

EMM 4403 - HUMAN RESOURCES AND RELATIONS MANAGEMENT

Human Resources and Relations Management covers the concepts of human resource management. Students will consider how the roles and responsibilities of personnel management are distributed internally and externally to a typical aviation organisation. The course takes a very practical view of HRM, using many examples, exercises, and cases. Students are encouraged to think about what HRM means, how it differs according to the nature of work in the aviation industry, by organisation, and in different regions and countries, and to consider what constitutes ethical human resource management.
CREDITS: 3.00

EMT 2023 - ELECTROMECHANICAL SYSTEMS

Understand and describe electromechanical machines and systems for a variety of industrial applications including DC machines and actuators, stepper motors and AC induction motors. Analyse three-phase electrical circuits and associate power systems. Apply sizing of power transmission components for a given system performance.
CREDITS: 3.00

EMT 2033 - ELECTRONICS SYSTEMS AND CIRCUITS

Understand the application of semiconductor devices and operational amplifiers to digital and analog circuits. Analyse combinational logic circuits and sequential logic circuits. Build common digital and analog circuit applications using diodes, thyristors, BJT, JFET, and MOSFET. Design control circuits utilising operational amplifiers.
CREDITS: 3.00

EMT 3013 - THERMOFLUID SYSTEMS

Understand thermofluid systems which involves the energy transfer and its conversion through fluids, using the principles of fluid mechanics and thermodynamics. Apply the continuity principle and energy conservation law to non-compressible steady flow processes and to solve energy balance problems for closed systems and open systems. Obtain properties of pure substances and ideal gases through the application of the ideal gas equation of state, property diagrams and the use of tables.
CREDITS: 3.00

EMT 4013 - INDUSTRIAL CONTROL SYSTEMS

Understand the fundamental systems and concepts of computer control with application to modern industry and manufacturing. Describe control system layout, components, various network topologies and protocols. Model, simulate by MATLAB, and analyse the response of a specified, closed-loop, computer-controlled, control system. Design and implement a computer-controlled system using appropriate hardware and software components.
CREDITS: 3.00

EMT 4923 - MECHANICAL VIBRATIONS

Understand and explain mechanical vibrations of single, two and multiple degree-of-freedom systems. Explain the principles of vibration control such as vibration

isolation and vibration absorbers. Conduct experiments to demonstrate the basic principles of mechanical vibrations.
CREDITS: 3.00

EPC 1403 - Practicum 1a

The practicum is central to the Bachelor of Applied Science in Education. In the "Beginning Teaching" phase of the programme, students complete a 12-15 day practicum in a primary and/or kindergarten setting. During this placement they will observe, implement and reflect upon learning highlighted in the education and methodology strands of the programme. Students will document current practice and undertake a minimum of two, paired or individual teaching activities with small groups of students under the direct supervision of the MST.
CREDITS: 3.00

EPC 1903 - Practicum 1b

The central component of the education programme is the supervised teaching practicum. Continuing the "Beginning Teaching" phase of the programme, student teachers complete a practicum over a 12-15 day period in a primary and/or kindergarten setting. Under the direct supervision of the MST, student teachers will apply strategies learned in corresponding courses to teach a minimum of three, paired or individual teaching activities to an entire class for part of a lesson. This should include one start, middle and ending.
CREDITS: 3.00

EPC 2403 - Practicum 2a

In the first semester of the "Emerging Teaching" phase of the programme, student teachers complete a practicum over a 15-20 day period during which coursework from corresponding courses will also be implemented. This takes place in a setting appropriate for their degree strand (ECE, EDT, EPR, ELT). Building on Practicum 1b and under the guidance of the MST, student teachers will plan, deliver and reflect upon the efficacy of a minimum of three, paired or individual complete teaching sessions with an entire class.
CREDITS: 3.00

EPC 2903 - Practicum 2b

In the final semester of the "Emerging Teaching" phase of the programme, student teachers complete a practicum over a 15-20 day period during which coursework from corresponding courses will also be implemented. This takes place in a setting appropriate for their degree strand (ECE, EDT, EPR, ELT). Building on Practicum 2a and under the guidance of the MST, student teachers will individually plan, deliver and reflect upon the efficacy of a minimum of three, complete teaching sessions with an entire class.
CREDITS: 3.00

EPC 3403 - Practicum 3a

In the "Sustained Teaching" phase of the programme, students complete a practicum of 20-25 days in which coursework from corresponding courses is also implemented in a setting appropriate to their degree strand (ECE, EDT, EPR, ELT). Building on Practicum 2b, with MST support, students will plan, deliver and reflect upon the efficacy of a minimum of seven, complete teaching sessions with an entire class. This includes 4 connected sessions in which students will apply formative assessment, personal reflection and critical feedback to inform future planning.
CREDITS: 3.00

EPC 3903 - Practicum 3b

In the final "Sustained Teaching" phase of the programme, students complete a practicum of 20-25 days in which coursework from corresponding courses is also implemented in a setting appropriate to the degree strand (ECE, EDT, EPR, ELT). Building on Practicum 3a, with MST support, students will plan, deliver and reflect upon the efficacy of a minimum of 10, complete teaching sessions with an entire class. This includes 4 connected sessions in which students will use formative and summative assessment, personal reflection and critical feedback to inform future planning.
CREDITS: 3.00

EPC 4403 - Practicum 4a

In the "Autonomous Teaching" phase of the programme, students complete a 25-30 day practicum in which coursework, including a Professional Development Plan and a preliminary research project from corresponding courses, is implemented in a setting appropriate to the degree strand (ECE, EDT, EPR, ELT). Building on Practicum 3b, students plan, deliver and reflect with increased autonomy, on a minimum 50% of MST teaching time. This ideally includes one full week of teaching taking on the full responsibility of the MST.
CREDITS: 3.00

EPC 4909 - Practicum 4b (Internship)

In the final "Autonomous Teaching" phase of the programme, students complete a 35-40 day internship ideally in the same setting where Practicum 4a was completed, in which coursework, including a Professional Development Plan and a Research Project from corresponding courses, are implemented. Building on Practicum 4a, students plan, deliver and reflect

with increased autonomy, on a minimum 60% of MST teaching time. This ideally includes two full weeks of teaching, taking on the full responsibility of the MST.
CREDITS: 9.00

EPR 2003 - LANGUAGE ARTS A (SPEAKING, LISTENING AND VOCABULARY)

Explore and examine significant international models of learning and teaching. Additionally, examine and evaluate approaches to the teaching of Speaking, Listening and Vocabulary to EFL learners. Develop and use sophisticated and accurate target language when on teaching practice.
CREDITS: 3.00

EPR 2203 - LANGUAGE ARTS B (TEACHING METHODS FOR THE PRIMARY SCHOOL TEACHER A)

Explore appropriate methods and strategies for the effective and integrated delivery of Language Arts in a primary classroom. Identify and evaluate a variety of international models for teaching including principles, concepts and skills. Analyse the implications for integrated content delivery in schools. Select and demonstrate appropriate suitable teaching methods for the particular aspect of language being taught.
CREDITS: 3.00

EPR 2503 - LANGUAGE ARTS C (READING/WRITING/ LITERATURE)

Explore and analyse the development and teaching of writing, and the role of texts in developing literacy in the English Medium Primary School.
CREDITS: 3.00

EPR 2603 - LANGUAGE ARTS D (TEACHING METHODS FOR THE PRIMARY SCHOOL TEACHER)

Explore appropriate methods and strategies for effective, integrated delivery of Language Arts i.e. teaching of reading in an English medium primary classroom. Identify and evaluate a variety of international models for teaching the principles, concepts and skills of English. Consider the implications for integrated content delivery in schools.
CREDITS: 3.00

EPR 3003 - MATHEMATICS FOR THE PRIMARY SCHOOL TEACHER

Develop competency in key content areas necessary to teach primary mathematics including: content knowledge, methodology and skills. Familiarisation with mathematic curriculum, content, learning tools, resources and standards. Explore and demonstrate teaching mathematics through problem solving at the primary level.
CREDITS: 3.00

EPR 3203 - MATHEMATICS TEACHING METHODS FOR THE PRIMARY SCHOOL TEACHER

Explore and demonstrate a broad range of student centred strategies to teach primary mathematics. Understand Constructivist, Behaviorist and Motivational theories related to teaching primary mathematics. Consider links between planning, instruction and assessment. Demonstrate how to appropriately incorporate ICT, and supportive resources/manipulatives to develop and improve the learning experiences.
CREDITS: 3.00

EPR 3503 - SCIENCE FOR THE PRIMARY SCHOOL TEACHER

Learn and apply contemporary primary science curricula in the classroom. Integrate knowledge, skills and attitude to teach at this level effectively. Understand and teach the nature of science, scientific skills and science terminology, through topics of life sciences, earth and space, and physical sciences.
CREDITS: 3.00

EPR 3703 - SCIENCE TEACHING METHODS FOR THE PRIMARY SCHOOL TEACHER

Develop methods and strategies to teach primary science effectively. Explore constructivism, the inquiry learning process and STEM learning. Develop planning skills for student centred science learning experiences. Identify and distinguish how formative and summative assessments can be used to develop a continuous assessment plan, focusing on assessment for learning. Demonstrate and apply questioning, effective use of materials and ICT, and assessment.
CREDITS: 3.00

EPT 1102 - INTRODUCTION TO PETROLEUM ENGINEERING

Provides an overview of the petroleum industry including the nature of oil and gas reserves, petroleum exploration and drilling, formation evaluation, well completion and production, surface facilities, reservoir mechanics, and improved oil recovery. It introduces the importance of ethical, societal and environmental considerations in the petroleum industry.
CREDITS: 2.00

EPT 2002 - PHYSICAL GEOLOGY

Describes the origin of the earth and its structure. The physical geology of the earth in a general context will be discussed, with more emphasis on oil and gas extraction applications. Identifies the materials making the earth's interior zone and exterior crust, as well as geologic processes affecting them.
CREDITS: 2.00

EPT 2043 - Fluid Mechanics and Heat Transfer
Identifies basics and applications of fluid mechanics: statics, mass, energy, and momentum balances; laminar and turbulent flow, Reynolds number, Moody diagram; flow of non-Newtonian fluids; multiphase flow; flow in porous media,and non-Darcy flow. Explains heat transfer: heat conduction and convection. Includes the analysis and selection of pumps, compressors and heat exchangers.
CREDITS: 3.00

EPT 2053 - Reservoir Petrophysics
Generates presentation and discussion of the physical properties of petroleum and gas reservoirs including lithology, strength, porosity, permeability, elastic/acoustic/electrical properties, and fluid transport properties such as capillary and saturation characteristics.
CREDITS: 3.00

EPT 2063 - Reservoir Fluids
Describes the thermodynamic behaviour of naturally occurring hydrocarbon mixtures, properties of petroleum, behaviour of gases, phase behaviour of liquids, qualitative and quantitative phase behaviour of hydrocarbon systems, and reservoir fluid characteristics. Applies these concepts to the prediction of gas and gas-condensate reservoir behaviour.
CREDITS: 3.00

EPT 3003 - Drilling Engineering
Includes drilling operations, drilling costs and economics, drilling fluids, pressure losses in circulating systems, rotary drilling bits and penetration rate, rotary drilling techniques, pore and fracture gradients. Wellbore, well planning, casing design, direction control, and drilling programme preparation are also included.
CREDITS: 3.00

EPT 3013 - Reservoir Engineering I
Generates fundamentals of evaluation of oil and gas reservoirs; reservoir volumetrics; material balance; Darcy's law and equation of continuity; diffusivity equation; streamlines; well models; introduction to well testing; decline curve analysis; and natural water influx.
CREDITS: 3.00

EPT 3023 - Well Performance
Identifies steady-state, pseudo steady-state, and transient well testing methods to determine well and reservoir parameters used in formation evaluation; applications to wells that produce gas and liquid petroleum; rate forecasting; and deliverability testing.
CREDITS: 3.00

EPT 3053 - Completion and Workover
States the continuation from drilling into completion engineering. Topics include: casing design; cement planning; completion techniques and equipment; tubing design; wellhead selection; sand control; and perforation procedures.
CREDITS: 3.00

EPT 3063 - Reservoir Engineering II
Identifies the advanced reservoir engineering concepts required for effective production of oil and gas: reservoir characterisation; reservoir heterogeneity and anisotropy; recovery mechanisms; Leverett J-functions; upscaling; flow simulation; history matching and forecasting; uncertainty and risk.
CREDITS: 3.00

EPT 3073 - Reservoir Characterisation
A comprehensive description of reservoir modelling, starting with the analysis of geological, geophysical and production data, then moving on to the construction of 3D geological models, with particular emphasis on practical and effective modelling.
CREDITS: 3.00

EPT 4002 - Design Project I
Front-end engineering design is required for new production facilities for a potentially viable oil/gas field. Common offshore and onshore field development modes are first reviewed. Various oil/gas processing systems are studied, including gas dehydration, condensate handling, acid gas removal, LPG extraction, and crude oil stabilisation. Design tasks include process simulation, preparation of process flow diagrams/ piping and instrument diagrams, HAZOP studies, and project management arrangements.
CREDITS: 2.00

EPT 4022 - Design Project II
Front-end engineering design is required for new production facilities for a potentially viable oil/gas field. Common offshore and onshore field development modes are first reviewed. Various oil/gas processing systems are studied, including gas dehydration, condensate handling, acid gas removal, LPG extraction, and crude oil stabilisation. Design tasks include process simulation, preparation of process flow diagrams/ piping and instrument diagrams, HAZOP studies, and project management arrangements.
CREDITS: 2.00

EPT 4102 - PETROLEUM PRODUCTION SYSTEMS

Describes: tubing and packer design; hydraulic fracturing and acidising; oil and gas well performance; vertical lift and choke performance; systems analysis; production operations; artificial lift design; sucker rod pumping, electric submersible pumping, plunger lift, and gas lift; design of surface production equipment; oil and gas separation; oil treating; gas dehydration; single and two-phase flow through pipes, fluid measurement ;and pipeline system design.
CREDITS: 2.00

EPT 4112 - PETROLEUM ECONOMICS AND RISK ANALYSIS

Identifies the tool required to analyse investments in the petroleum industry and emphasises on the risk and uncertainty in petroleum investments and the stochastic nature of petroleum reservoir operations. Includes depletion and petroleum taxation regulation, project evaluation and case studies.
CREDITS: 2.00

EPT 4203 - RESERVOIR SIMULATION

Generates solutions to reservoir engineering problems using reservoir simulation software with data provided by the industry. Includes: reservoir description; reservoir model design and calibration; production forecasting and optimisation; and economic analysis and decision making under uncertainty. Uses Eclipse and other popular reservoir models.
CREDITS: 3.00

EPT 4213 - WELL TEST ANALYSIS AND DESIGN

Applies the solution to the diffusivity equation and transient well testing to petroleum engineering technology and includes build-up, drawdown, multi-rate test analysis for oil and gas, flow tests and well deliverabilities. The type curve, superposition, active and interference tests, well test design, and well test analysis using type curve are analysed and simulated.
CREDITS: 3.00

EPT 4223 - ADVANCED DRILLING ENGINEERING

Analyses the rotary drilling systems, with emphasis on the design of drilling programmes, directional and horizontal well planning Casing setting depths calculation for surface, intermediate and production casings. Casing design and selection. Introduces offshore drilling.
CREDITS: 3.00

EPT 4233 - GEOSTATISTICS

Introduces: the elementary probability theory and its applications in engineering and sciences; continuous probability distributions; parameter estimation; hypothesis testing; linear regression; spatial correlations and geostatistics with emphasis on applications in earth sciences and engineering.
CREDITS: 3.00

EPT 4243 - NATURAL GAS PRODUCTION

States the reservoir and flow-line analysis and design for gas field development. Includes: material balance equation; gas condensate reservoirs; deliverability; pressure testing; separation; rate measurements; flow in pipes; and gas storage.
CREDITS: 3.00

EPT 4253 - ENHANCED OIL RECOVERY

Generates the chemical and thermal methods of EOR. Specific topics include: interfacial tension; entrapment and mobilisation of oil in porous media; residual oil; miscibility; adsorption at solid/liquid interfaces; surfactants and micro-emulsions; miscible gas flooding; polymer flooding; thermal methods; and effect of reservoir heterogeneity.
CREDITS: 3.00

EPT 4263 - PETROLEUM ENGINEERING NUMERICAL ANALYSIS

Uses numerical methods in a variety of petroleum engineering problems: numerical differentiation and integration; root finding; numerical solution of differential equations; curve fitting and interpolation; and computer applications. introduces the principles of numerical simulation methods.
CREDITS: 3.00

EPT 4273 - SEPARATION AND TREATMENT OF PETRO FLUIDS

Identifies the deal with design of separation and treatment facilities for crude oil. Topics covered include: phase behaviour of water-hydrocarbon systems; flash calculations; the sizing and design of 2 and 3- phase oil and gas separators; oil-water emulsions and heater-treater design; treatment of oil field waters; and the selection and design of oil skimmers.
CREDITS: 3.00

EPT 4283 - WELL COMPLETION AND STIMULATION

States the completion parameters; design for well conditions; skin damage associated with completions and well productivity; fluid types and properties; characterisations of compatibilities. Stimulation techniques; acidizing and fracturing. Selection of fluid types, placement and compatibilities. Estimation of rates, volumes and fracture dimensions.
CREDITS: 3.00

EPT 4293 - Production Engineering
Fundamental production engineering design, evaluation, and optimisation is applied to oil and gas wells and includes: well deliverability; formation damage and skin analysis; completion performance; and technologies that improve oil and gas well performance, including artificial life and well stimulation. Secondary and tertiary recovery methods are discussed.
CREDITS: 3.00

ERK 3004 - Work Placement
Gain relevant engineering experience in an actual working environment in order to provide an opportunity to develop and apply professional work ethics and practices. Transfer of engineering skills learned at college to the workplace is a major feature of this course.
CREDITS: 4.00

FND 1016 - Foundations English Level I
This is the first of four English language courses in the Foundations programme. Students enter Level 1 if their English proficiency is at or below CEFR A2 (CEPA 155 or below), and during the course learn A2 vocabulary, grammar and communicative skills. By the end of the course, students are expected to have reached a high A2 / low A2+ level of proficiency (CEPA 156) in order to progress to Level 2.
CREDITS: 16.00

FND 2016 - Foundations English Level II
This is the second of four English language courses in the Foundations programme. Students enter Level 2 if their English proficiency is high A2 / low A2+ (CEPA 156-162), and during the course learn A2+ vocabulary, grammar and communicative skills. By the end of the course, students are expected to have reached a high A2+ / low B1 level of proficiency (CEPA 163) in order to progress to Level 3.
CREDITS: 16.00

FND 3016 - Foundations English Level III
This is the third of four English language courses in the Foundations programme. Students enter Level 3 if their English proficiency is high A2+ / low B1 (CEPA 163-169), and during the course learn B1 vocabulary, grammar and communicative skills. By the end of the course, students are expected to have reached a high B1 / low B1+ level of proficiency (CEPA 170) in order to progress to Level 4.
CREDITS: 16.00

FND 4016 - Foundations English Level IV
This is the last of four English language courses in the Foundations programme. Students enter Level 4 if their English proficiency is high B1 to low B1+ (CEPA 170-179), and during the course learn B1+ vocabulary, grammar and communicative skills. By the end of the course, students are expected to have reached a high B1+ / low B2 level of proficiency (CEPA 180 / IELTS 5.0).
CREDITS: 16.00

FND M010 - Foundation Mathematics I
This is the first module of Foundations Math. It focuses on introducing and developing basic mathematical knowledge, skills and proficiency. The course develops conceptual understanding and procedural fluency and prepares students for Foundations Math 2 (FND M020), the second module, which focuses on further enhancing their knowledge and skills to apply math skills in BAS courses and practical life.
CREDITS: 4.00

FND M020 - Foundation Mathematics II
This is the second module of Foundations Math. It focuses on strengthening and building math conceptual understanding, procedural fluency and applied skills further to prepare students effectively to apply math skills in BAS courses and practical life.
CREDITS: 5.00

HEM 2106 - EMT Basic (I)
Provides the knowledge and skills required for emergency pre-hospital care involving basic medical conditions. Outcomes include the theory and practice related to a range of emergency technical skills, including medical assessment, defibrillation, suctioning, airway management and the fundamentals of competent drug administration.
CREDITS: 6.00

HEM 2207 - EMT Basic (II)
Provides the knowledge and skills required for emergency pre-hospital care and management of patients experiencing trauma to the upper and lower body, including the abdomen. Theory and practice are provided related to trauma assessment, splinting, spinal immobilisation, and emergency transport.
CREDITS: 7.00

HEM 2304 - EMT Advanced (I)
Provides knowledge and skills required for an EMT-Basic to progress to competency as an advanced EMT. An understanding of the roles and responsibilities of the advanced EMT within the EMS system is developed. The assessment of emergency medical patient along with pathophysiology, the roles and responsibilities of the advanced EMT, and communication in the pre-

hospital setting will be addressed.
CREDITS: 4.00

HEM 2404 - EMT Advanced (II)
Provides the knowledge and skills required for an EMT-Paramedic to progress to competency as a Paramedic. An understanding of the roles and responsibilities of a Paramedic within the EMS system is developed. The management of emergency medical patients along with pathophysiology, pharmacology, proper medication administration and communication in the pre-hospital setting will be addressed.
CREDITS: 4.00

HEM 2508 - EMT Advanced (III)
Provides the knowledge and skills required for an EMT-Paramedic to progress to competency as a Paramedic. An understanding of the roles and responsibilities of a Paramedic within the EMS system is developed. The management of emergency medical patients along with pathophysiology, pharmacology, proper medication administration and communication in the pre-hospital setting will be addressed.
CREDITS: 8.00

HEM 2902 - Ambulance Preceptorship I
Provides the opportunity for clinical practice in the advanced life support pre-hospital and hospital setting. Clinical practice will be under the supervision of pre-hospital and hospital staff and related to the required skills of the Emergency Medical Technician.
CREDITS: 3.00

HEM 2922 - Ambulance Preceptorship II
Provides the opportunity for clinical practice in the advanced life support in a pre-hospital and hospital setting. Clinical practice will be under the supervision of pre-hospital and hospital staff and related to the required skills of the Emergency Medical Technician.
CREDITS: 3.00

HEM 3108 - EMT Paramedic (I)
Provides knowledge and skills required for the EMT-Paramedic to progress to competency in Advanced Life Support emergency medical care. An understanding of the roles and responsibilities of a Paramedic during complicated situations involving cardiovascular, pulmonary, and neurological emergencies is developed. The management of emergency medical patients along with pathophysiology, pharmacology, proper medication administration and communication in the pre-hospital setting will be addressed.
CREDITS: 8.00

HEM 3208 - EMT Paramedic (II)
Provides knowledge and skills required for the EMT-Paramedic to progress to competency in Advanced Life Support emergency medical care. An understanding of the roles and responsibilities of a Paramedic during complicated situations involving pediatric, obstetrical, gynecological, geriatric, endocrine, urological, toxicological and traumatic emergencies is developed.
CREDITS: 8.00

HEM 3902 - Hospital Ambulance Preceptorship I
Provides the opportunity for clinical practice in the advanced life support pre-hospital and hospital setting. Clinical practice will be under the supervision of pre-hospital and hospital staff and related to the required skills of the Emergency Medical Technician- Advanced.
CREDITS: 3.00

HEM 3922 - Hospital Ambulance Preceptorship II
Provides the opportunity for clinical practice in the advanced life support pre-hospital and hospital setting. Clinical practice will be under the supervision of pre-hospital and hospital staff and related to the required skills of the Emergency Medical Technician- Advanced.
CREDITS: 3.00

HEM 3944 - Summer Preceptorship
Provides the opportunity for clinical practice in the advanced life support pre-hospital and hospital setting. Clinical practice will be under the supervision of pre-hospital and hospital staff and related to the required skills of the Emergency Medical Technician- Advanced.
CREDITS: 5.00

HEM 4003 - Advanced Pharmacology
Provides high level training on delivering patient care using advanced pharmacological intervention. Utilisation of international EMS statistics for the introduction of new policies on pharmacological intervention in advanced emergency care is covered. Application of oversight and control procedures using the QA/QI process. An opportunity will be given to develop teaching and training materials regarding advanced pharmacology in emergency care.
CREDITS: 3.00

HEM 4103 - Emergency Medical Services Management
Assesses the environmental constraints and resource limitations that exist in the United Arab Emirates and similar health care systems throughout the developing world. Development of consistency in basic management, leadership and administrative skills with a clear understanding of the concepts is achieved.

Awareness of different theories of management and management styles is gained.
CREDITS: 3.00

HEM 4203 - Evidence Based Medicine and Research Analysis

Covers reading and analysis of peer-reviewed scholarly papers to prepare EMS responders to make practice recommendations and decisions about all aspects of EMS in light of evidenced-based research. The topics covered include: levels of evidence; detection of bias; research study designs; and statistical.
CREDITS: 3.00

HEM 4303 - Advanced Clinical Practice

Provides the opportunity for paramedics to review and learn advanced level patient care in all environments and provides advanced medical and trauma care by utilising student prepared workshops and audio-visual/ multi media training materials. Opportunity will be given to present the advanced level training material to groups of students.
CREDITS: 3.00

HEM 4418 - Advanced Clinical Supervision

Prepares the student for Advanced Clinical Supervision and Emergency Medical Services (EMS) Management. Application of quality assurance concepts in clinical practice and in service delivery principles is achieved. Practice advanced level team leadership skills related to the care of critically ill and injured, as well as advanced clinical skills for patient care will be undertaken.
CREDITS: 8.00

HEM 4478 - International Trip Option for Paramedics

Offers an opportunity to travel abroad to visit Emergency Medical Services and to gain valuable experience in established systems. During these international trips, learners will have opportunities to see clinical practice guidelines being utilised, and will also be given an opportunity to participate in an international setting. This course is intended to serve as a benchmarking exercise for good professional practice. It encourages students to continuously strive to reach and exceed international standards.
CREDITS: 8.00

HEM 4944 - International Preceptorship

Provides students with the required opportunity for advanced life support clinical practice development in an international pre-hospital and hospital setting. Clinical practice will be under the supervision of international local pre-hospital and hospital staff. All clinical experiences are related to the required skills of the Emergency Medical Technician-Paramedic.
CREDITS: 5.00

HIM 1203 - Health Information Coding I (Introduction)

Covers the basics in applying appropriate codes from the latest International Classification of Diseases (ICD) to classify events of morbidity, mortality, surgical procedures and other non-surgical interventions with an emphasis on accuracy, completeness, and sequencing. It covers all body systems. Maternity, oncology, and external causes of morbidity and mortality are also covered. Factors influencing health status and contact with health services are included.
CREDITS: 3.00

HIM 2003 - Health Information Coding II (Intermediate)

Offers a comprehensive approach to incorporate coding principles from theory to practice at an intermediate level, as well as introducing students to the science of pharmacology, focusing on the rationale for appropriate code assignment. Students are required to apply their knowledge of pharmacology when coding case studies.
CREDITS: 3.00

HIM 2103 - Applied Pathophysiology for Health Information Management

Introduces pathophysiological processes of the body systems. The etiology, clinical features, diagnostic testing procedures and management of a selection of disorders affecting the major body systems is studied namely: gastrointestinal; respiratory; cardiovascular including blood and lymphatic, nervous and endocrine; musculoskeletal; urinary; and reproductive systems. An understanding of medical terminology used in describing clinical signs and symptoms, diagnostic techniques (laboratory based and radiological), surgical and medical procedures performed that comprise the patient's record is developed. An emphasis is placed on the application of knowledge of pathophysiology to Health Information Management.
CREDITS: 3.00

HIM 2203 - Health Information Management Studies

Develops an understanding of comprehensive health information management skills: categorisation and processing of patient information into indexes, registers, registries, as well as the more common nomenclatures and classification systems, including the activities and functions of a typical health information

management department. Introduces computerised record processing systems, using related patient data systems as examples whilst managing data quality and maintaining patient confidentiality.
CREDITS: 3.00

HIM 2303 - Health Information Coding III (Advanced)

Develops further knowledge on health information coding using the latest ICD version, along with an understanding, and the application, of abstracting and coding audits and the implication of these processes on the provision of better health planning, financing and administration. An understanding of the link between case mix, diagnostic related groups and health funding models and how these tools contribute to the provision of better health outcomes is also developed.
CREDITS: 3.00

HIM 2403 - Introduction to Management in Health Care

Basic understanding of organisational management, motivation, leadership and conflict management is developed, along with an understanding of the functions of management from the viewpoint of a manager who is responsible for creatively solving problems and facilitating creative problem solving efforts in others.
CREDITS: 3.00

HIM 2903 - Health Information Management Hospital Preceptorship

Provides an opportunity for the application of knowledge and skills in an active health record department. Students acquire knowledge in, and experience with, the structure and responsibilities of a health records department and interdepartmental relationships. Students gain procedural experience in assembly, analysis, filing, management of master patient index, management of incomplete record processing, record tracking, and release of health information.
CREDITS: 4.00

HIM 2923 - Coding Practicum

Offers a clinical coding practicum where students apply diagnosis and procedure coding techniques to actual patient records in an acute care practice environment. The current version of the International Classification of Diseases (ICD) in utilised in this practicum in alignment with best practice. The coding practicum provides opportunities to code increasingly complex medical, surgical, obstetrical, and newborn records with an emphasis on speed, accuracy, completeness and sequencing. In addition, the practicum provides an opportunity to audit and suggest improvements to coding practices, which may not comply with best practice standards.
CREDITS: 4.00

HIM 3003 - Biostatistics

Introduces statistical concepts and their application in health information management. Emphasis is on the basic concepts and processes that use data to enhance understanding of health information. Topics include: measures of central tendency; distributions; and hypothesis testing that will be applied to health information management case studies.
CREDITS: 3.00

HIM 3103 - Health Informatics I

Introduces the essential concepts and applications of information systems (IS) and information technology (IT) in health care environments. Upon successful completion of this course, students are expected to assess and appreciate the appropriateness of computer hardware, software, and networking technologies in health care settings.
CREDITS: 3.00

HIM 3203 - Health Informatics II

Develops further understanding and application of concepts related to strategic planning, analysis, design, evaluation, selection and implementation of health information systems. Also develops an understanding and evaluation of different patient care applications including administrative, clinical, decision support, and e-health applications.
CREDITS: 3.00

HIM 3303 - Epidemiology

Develops a basic understanding of core and central concepts in epidemiology. Includes historical origins, purpose and uses of epidemiology. Emphasis is on measurement as well as data interpretation. Epidemiological study designs are used to enhance understanding of investigation of disease outbreak.
CREDITS: 3.00

HIM 3902 - Work Experience for Health Information Management

Allows Health Information Management students to work on specific projects related to the programme goals. Projects will be selected from any of the major health information management functions and also in relation to the requests and needs of the host site. The emphasis of this practicum is on working independently and applying work ethics and professionalism. A final project report is to be submitted to the host site supervisor and college instructor.
CREDITS: 5.00

HIM 4003 - Intermediate Management in Health Care

Covers financial and human resource management in the health care industry. For financial management, an overview of accounting systems and controls in health care: managerial accounting; budgeting; staffing; and reporting tools, is included. Human resource management will cover an introduction to human resource management, strategy and planning. Develops an understanding of processes such as recruitment, selection, training, performance appraisals, counseling, disciplinary action, grievance and dismissal management as well as occupational health and safety in the workplace environment.
CREDITS: 3.00

HIM 4103 - Health Data Analysis

Assesses the collection, interpretation and uses of health data beyond the client/patient treatment and disease/operation classification stages. Key emphases include: health data applications in management and clinical decision-making; performance indicators for health care funding; use and evaluation of coded and non-coded sources of health data for research; data management for clinical trials; and regulatory and management issues surrounding registries and databases. Using coded data in clinical and non clinical studies and comparing key health classifications via analysis of historical coded data are also included.
CREDITS: 3.00

HIM 4203 - Research Methods in Health Care

Develops an understanding of the process of scientific inquiry. Quantitative and qualitative methods are covered. Emphasis is on developing a critical scientific approach to evaluating scientific literature, developing a research proposal and data collection tool. It includes the application of developed theoretical background to a research project.
CREDITS: 3.00

HIM 4303 - Health Care Economics and Health Insurance

Develops an understanding of health economics and economic analysis of the health care market. Identifies and assesses factors that control the health care insurance industry; describes and discusses the different models of health care cost control, including case mix funding systems and managed care programmes; describes and discusses the impact of adopting new technologies on cost of health care services; and finally, considers and discusses the ethical and political aspects of these new health care funding models from a global perspective.
CREDITS: 3.00

HIM 4403 - Advanced Management in Health Care

Focuses on strategic management and its application in health care. Topics covered include: strategic planning and forecasting; marketing; organisational assessment; benchmarking; quality improvement; workplace re-design; and process re-engineering. Applies knowledge and skills gained to develop a departmental strategic plan and demonstrate the implementation of the plan at departmental and organisational levels.
CREDITS: 3.00

HIM 4924 - Professional Experience

Offers a practical application of the skills and knowledge accumulated in the four years of the programme. It is a continuation of the research proposal developed in the research methods course. During this final practicum, data is collected, analysed and a final report of findings is developed and presented to health care representatives and the course instructor. Special emphasis is placed on professionalism, leadership and creative problem solving in the health care setting.
CREDITS: 5.00

HMI 1103 - Introduction to Medical Imaging

Introduces the core aspects of the medical imaging profession and the BSc Medical Imaging (MI) programme. States the history of medical imaging, the roles and responsibilities of medical imaging personnel, the application of core diagnostic imaging modalities, radiation safety practices, elementary aspects of patient care, and clinical ethics. Develops knowledge and understanding of the role and responsibilities of the radiographer in modern medical imaging practice.
CREDITS: 3.00

HMI 2001 - Patient Care I

Develop an understanding of the fundamentals of patient care in medical imaging environments, specifically in the areas of infection control, manual handling, patient communication and data confidentiality. Develop an understanding of patient care for mobile and restricted mobility patients, and clients frequently encountered in non-critical medical imaging departments.
CREDITS: 1.00

HMI 2002 - Medical Imaging Technology I

Identify the basic design and function of standard medical X-ray equipment, X-ray image receptors, and X-ray image processing. In addition, recognise and explain the function of the various parts of an X-ray unit, how X-rays are produced, how X-rays interact with matter and the various factors that affect the quality and quantity of the X-rays produced. Describe the quality of medical images in precise terms, such as

spatial and contrast resolution, with regard to As Low As Reasonably Achievable (ALARA) principles.
CREDITS: 3.00

HMI 2102 - Medical Imaging Technology II

Examine how digital medical images are produced, manipulated and transmitted between medical imaging modalities and hospital information systems. Define dedicated digital imaging systems such as Patient Archive and Communication Systems (PACS), Radiology Information Systems (RIS), and the parameters used in analysing digital image quality. Investigate the design, function and operation of fluoroscopic, mobile and theatre X-ray equipment.
CREDITS: 3.00

HMI 2303 - Medical Imaging Positioning and Procedures I

Recognise the art of radiographic positioning for plain X-ray imaging, focusing on the upper and lower extremities, the spine, pelvis, hips, and chest. A mix of theory and simulated practice using medical imaging terminology will provide and develop radiographic positioning and patient care skills. Using the acquired knowledge and skills, examine a plain X-ray imaging of the appendicular skeleton, spine, and chest in modern medical imaging practice.
CREDITS: 3.00

HMI 2403 - Medical Imaging Anatomy and Pathology I

Examine image critique skills for diagnostic images of the upper and lower extremities, the spine, pelvis, hips, and chest. Recognise, identify and describe normal medical imaging anatomy and commonly encountered pathologies on a range of X-ray examinations. Apply specific image interpretation terminology to evaluate image content in terms of normal and abnormal findings and to assess image quality. Develop an understanding of the nature of disease and the role of X-ray imaging in patient care and clinical management.
CREDITS: 3.00

HMI 2503 - Medical Imaging Positioning and Procedures II

Develop an understanding of the art of radiographic positioning for plain X-ray imaging of the abdomen, skull, maxillary-facial structures, and dentition. Examine mobile and theatre imaging and describe the fundamentals of contrast media imaging. Use medical imaging equipment to perform radiographic positioning and relevant patient care skills. Develop skills in plain X-ray imaging and the role of mobile, theatre and contrast media examinations in modern medical imaging practice.
CREDITS: 3.00

HMI 2603 - Medical Imaging Anatomy and Pathology II

Develop image critique skills for diagnostic X-ray images of the abdomen, skull, maxillary-facial structures and dentition to include fluoroscopic, mobile and theatre images and basic contrast media studies as appropriate. Develop further skills in basic anatomical image interpretation, image critique and disease classification to recognise, identify and describe normal anatomy and commonly encountered pathologies. Develop enhanced image critique skills in a range of diagnostic imaging examinations and an understanding of their role in modern medical imaging practice.
CREDITS: 3.00

HMI 2904 - Clinical Preceptorship I

Apply previously taught theory of medical imaging technique and patient care into authentic clinical practice. Learning takes place within safe, supervised, clinical learning sites approved by partner health authorities. Clinical Preceptorship will be supervised by trained preceptors to develop skills in safe radiographic technique and patient care for plain X-ray imaging of the upper and lower extremities, spine and chest.
CREDITS: 5.00

HMI 3001 - Patient Care II

Develop an understanding of the fundamentals of patient care for ward, theatre, trauma, and acute care medical imaging environments. Develop applied understanding of the safe administration of radiological contrast agents to include precautions of use and emergency responses to adverse contrast media reactions. Identify safe patient handling for therapeutic interventions such as drips, oxygen, suction and electronic patient monitoring. Develop an understanding of patient care in acute care medical imaging environments.
CREDITS: 1.00

HMI 3002 - Medical Imaging Technology III

Examine the design, use, and function of fluoroscopy equipment used in diagnostic, angiographic and interventional radiology. Evaluate radiation doses in specialist modalities to determine best clinical application. Demonstrate the use of dedicated mammography units and mammography accessories and compare mammographic equipment with standard X-ray equipment. Develop a knowledge base in the design of equipment used to produce images in Nuclear Medicine (NM) examinations, including Dual-energy X-ray absorptiometry (DEXA) scanning equipment

used in bone densitometry.
CREDITS: 3.00

HMI 3102 - Medical Imaging and Positioning III
Describe the application of specialist medical imaging modalities to include pediatric imaging, mammography, diagnostic and interventional fluoroscopy, Nuclear Medicine and Dual-energy X-ray absorptiometry (DEXA) relating pathology to imaging practice. Develop knowledge and applied understanding of these specialist imaging modalities to evaluate their best use and their role in modern medical imaging practice.
CREDITS: 3.00

HMI 3202 - Specialised Imaging I
Develop the required technical knowledge of specialised imaging modalities including an understanding of the scientific principles that form the basis of each imaging system. Describe the design and function of specific equipment used in Computerised Tomography (CT), Medical Ultrasound (US), Magnetic Resonance Imaging (MRI) and acute trauma. Develop necessary skills to explain and evaluate the technical aspects of these advanced imaging systems and their clinical applications.
CREDITS: 2.00

HMI 3212 - Radiation Safety and Biology
Distinguish radiation protection methods and equipment for both patients and health care professionals. Examine the theories of cell biology, the units of radiation dosage and the biological effects of ionising radiation interaction with human tissue. Describe factors affecting biological response including acute and chronic effects of radiation exposure, dose limitation guidelines and radiation protection regulations and codes of practice. Develop knowledge and applied understanding of best radiation safety practices including evaluation application of As Low As Reasonably Achievable (ALARA) principles in modern medical imaging practice.
CREDITS: 2.00

HMI 3312 - Cross-Sectional Anatomy
Develop applied skills in recognising and describing cross-sectional anatomy and commonly encountered pathologies for Computed Tomography (CT), Magnetic Resonance Imaging MRI, Ultrasound (US), and relevant multi-planar imaging modalities. Analyse cross-sectional images relating appearances to normal anatomy and abnormal pathologies. Develop the ability to evaluate cross-sectional images and discuss the value of multi-planar imaging in modern medical imaging practice.
CREDITS: 2.00

HMI 3922 - Clinical Preceptorship II
Apply previously taught theory of medical imaging technique and patient care into authentic clinical practice. Learning takes place within safe, supervised, clinical learning sites approved by partner health authorities. Develop further skills in plain X-ray imaging of the skull, facial bones and dentition, the abdomen and in elementary fluoroscopic and contrast study examinations.
CREDITS: 5.00

HMI 3934 - Clinical Preceptorship III
Apply previously taught theory of medical imaging technique and patient care into authentic clinical practice. Learning takes place within safe, supervised, clinical learning sites approved by partner health authorities. Develop further radiographic and patient care skills in theatre radiography, elementary contrast media studies, fluoroscopy, mammography and nuclear medicine imaging.
CREDITS: 5.00

HMI 3944 - Clinical Preceptorship IV
Apply previously taught theory of medical imaging technique and patient care into authentic clinical practice. Learning takes place within safe, supervised, clinical learning sites approved by partner health authorities. Develop previously acquired radiographic and patient care skills in general X-ray, theatre and mobile imaging, mammography, nuclear medicine and fluoroscopy; and where clinically appropriate, be introduced to angiography, advanced trauma, Computed Tomography (CT), Magnetic Resonance Imaging (MRI), and Ultrasound (US) imaging modalities.
CREDITS: 9.00

HMI 4002 - Specialised Imaging II
Develop an understanding of the theory, practice and clinical application of specific cross-sectional imaging modalities to include Computed Tomography (CT), Magnetic Resonance Imaging MRI, Ultrasound (US), and advanced trauma imaging. Distinguish advanced clinical education in specialised elective imaging courses. Describe patient preparation care during and after cross sectional imaging and address relevant common clinical pathologies.
CREDITS: 2.00

HMI 4003 - Quality Management in Medical Imaging
Develop skills in explaining and evaluating international quality management systems that are used to maintain and improve performance in health care organisations and justify their application in medical imaging.

Apply basic quality measurement tools and critically appraise the results they provide. Analyse how quality management tools are used by health care organisations to deliver quality improvement that is timely, effective and patient centred. Assess how quality standards are used to maintain and improve medical imaging services as an integral part of a total quality management programme.
CREDITS: 3.00

HMI 4102 - Specialised Imaging Elective

Analyse knowledge gained and applied understanding of an elected area of specialist practice such as Computed Tomography (CT), Magnetic Resonance Imaging MRI, Ultrasound (US), or advanced trauma. Modalities offered for elective study are based on clinical availability to support the development of advanced clinical practice skills. Reflect upon personal competencies in a specialist imaging modality to evidence understanding of clinical practice at an advanced level.
CREDITS: 3.00

HMI 4103 - Research Project I

Develop applied understanding of the fundamental principles of scientific research methodology and skills in the construct of a research proposal. Analyse methods to formulate research questions, identify a suitable method of inquiry, plan a primary research project and contemplate ethical considerations surrounding research efforts to competently construct an authentic research proposal. Develop necessary applied understanding and experience to competently construct a research proposal at a novice level.
CREDITS: 3.00

HMI 4203 - Professional Practice

Develop an understanding of fundamental research skills in the form of a specific intended small scale research study. Demonstrate competence in analysing collected data by means of appropriate software and in reporting the outcomes of the completed study. Develop the necessary understanding and experience to successfully complete all elements involved in the execution of a small scale scientific research study.
CREDITS: 3.00

HMI 4303 - Research Project II

Apply fundamental research skills in the form of a specific intended small scale research study. Demonstrate competence in analysing collected data by means of appropriate software and in reporting the outcomes of their completed study. Develop necessary understanding and experience to successfully complete all research project elements.
CREDITS: 3.00

HMI 4952 - Clinical Preceptorship V

Apply previously taught theory of medical imaging technique and patient care into authentic clinical practice. Learning takes place within safe, supervised, clinical learning sites approved by partner health authorities. Develop previously acquired radiographic and patient care skills in all areas of general X-ray, theatre and mobile imaging. Elective learning in a specialist modality such as angiography or advanced trauma, Computed Tomography (CT), Magnetic Resonance Imaging MRI, and Ultrasound (US) or Nuclear Medicine (NM) imaging modalities will be provided.
CREDITS: 9.00

HML 1003 - Haematology I

An introduction to the work carried out in a haematology laboratory and emphasis on the importance of correct and complete sample collection on the quality of results is important to build on for the subsequent Haematology II course. Students learn about normal haemopoietic cell production, the use of blood cell counters and data interpretation. Students will recognise normal and abnormal red cells and describe the causes and effects of various types of anaemia.
CREDITS: 3.00

HML 1103 - Microbiology I

The theoretical concepts and practical techniques used in the classification, isolation and identification of microorganisms is important to build on for the subsequent Microbiology II course. The course comprises the study of the concepts of infection, transmission of disease, pathogenicity, body defense mechanisms, prevention and control of infections. Students learn techniques used in the diagnosis of bacterial infections. Instruction in safe working practices and the concept of, and the need for, quality control are an integral part of the course.
CREDITS: 3.00

HML 1203 - Clinical Chemistry I

Learning the foundations for the theory and practical aspects of Clinical chemistry is important to build on for the subsequent Clinical Chemistry II course. Identification of laboratory safety, mathematics, quality assurance, and analytical principles of basic clinical chemistry procedures are covered. At a novice level an introduction to normal physiology and common pathologies are discussed and analysed. Theoretical learning is applied through manual techniques during

laboratory exercises, applying principles to the analysis of the chemical constituents of blood and other body fluids.
CREDITS: 3.00

HML 1302 - Basic Laboratory Skills
An overview of theory, application, and hands-on experience in a medical laboratory is crucial to acquiring skills in all Medical Laboratory disciplines. It is also intended to develop the psychomotor skills needed to work safely and efficiently. Procedure recording, calculations, data acquisition, and analysis of laboratory activities are covered. Experimental techniques, including reagent preparation, filtration, centrifugation, spectroscopy, and microscopy are examined in detail, appropriate to a novice laboratory scientist.
CREDITS: 2.00

HML 2003 - Haematology II
This course will begin with instruction on the detection, diagnosis and laboratory investigation of the haemoglobinopathies. The importance of conditions such as sickle cell disorders and thalassaemia will be discussed with particular reference to their prevalence and importance in the UAE. This will be followed by a study of normal and abnormal white blood cell formation. Subjects to be discussed: changes in systemic and infectious diseases; and in haematological malignancies. The structure and importance of the HLA system and stem cell transplantation will also be discussed.
CREDITS: 3.00

HML 2023 - Haematology III
Explaining normal haemostasis and the roles and interactions of the blood vessels, platelets, and coagulation and fibrinolytic systems are the key to becoming an effective haematology technologist. The inherited and acquired disorders of haemostasis will be studied and students will carry out the practical tasks needed to differentiate and diagnose these disorders. The causes and clinical effects of thrombosis will be discussed. Students will carry out the appropriate laboratory tests involved in the diagnosis and treatment of these disorders.
CREDITS: 3.00

HML 2103 - Microbiology II
Further identification and clinical correlations of bacteria encountered in clinical specimens follows on from Microbiology I course. This involves performing procedures and interpretation of microscopic, cultural, biochemical and serological techniques used in the isolation and identification of bacteria commonly encountered in the medical microbiology laboratory. There is continued instruction in the dangers of handling biohazardous clinical specimens and how to perform all tasks safely, following accepted aseptic procedures. Performance and interpretation of antimicrobial susceptibility tests are also covered.
CREDITS: 3.00

HML 2123 - Microbiology III
Further identification and clinical correlations of bacteria encountered in clinical specimens follows on from Microbiology II course, mainly blood and body fluids. In addition, the course includes the study of parasitic, viral, fungal infections and their diagnosis. The student assesses and performs, as appropriate, the specimen collection and processing, microscopic, cultural and immunological techniques used in the isolation and identification of fungi and parasites.
CREDITS: 3.00

HML 2203 - Clinical Chemistry II
Performing a range of manual techniques for analysis in clinical chemistry laboratory in addition to an introduction to automated chemistry analysers will enhance the crucial skills set required for working in the medical laboratory. Students describe and apply the principles of enzymology along with measurement techniques. Students comprehend normal physiology and pathology related to each of the analytes including liver function tests and cardiac enzymes. Students complete laboratory exercises which reinforce application of principles in manual and automated analysis.
CREDITS: 3.00

HML 2223 - Clinical Chemistry III
Advanced topics in Clinical Chemistry include; lipid metabolism and its relationship to cardiovascular disease; prostate diseases; mineral metabolism (calcium, inorganic phosphate, and magnesium); human Chronic Gonadotropin; thyroid function; introduction to therapeutic drug monitoring; immunoassay methods; acid base balance; and Ion Selective Electrodes are covered. Students examine the inter-relationships of disease and clinical chemistry values along with related analytical techniques in assessing the previous topics. Laboratory exercises complement the concepts covered in the classroom. Proficiency in running, calibrating and trouble shooting the instruments used in the lab is an expected outcome. Students are exposed to more advanced forms of analysis in a hospital laboratory.
CREDITS: 3.00

HML 2302 - TRANSFUSION SCIENCE I

The nature of antigen-antibody reactions and the inheritance and structure of blood group antigens are discussed. Laboratory exercises reinforce the students' understanding by providing the opportunity to perform a variety of blood grouping techniques. Blood donation, screening and processing of blood and blood products, and the testing of donors and recipients to ensure safe transfusion practice will be discussed. The importance of effective quality control and quality assurance in blood transfusion centres and laboratories will be presented.
CREDITS: 2.00

HML 2342 - TRANSFUSION SCIENCE II

The laboratory testing procedures necessary to ensure the safe provision of blood products are the topics discussed. Learning in both theory and practical sessions on how to perform the required grouping and matching procedures, and to detect and identify clinically significant antibodies is covered. Instruction will be given on the possible adverse effects of transfusion procedures and on the method of investigating an alleged blood transfusion reaction.
CREDITS: 2.00

HML 3006 - CLINICAL CORRELATIONS

Bringing together the various streams of knowledge taught in Microbiology, Haematology, Clinical Chemistry and Blood Banking in the context of the clinical case of patients is the aim of this course. Students study a selection of diseases and disorders. The emphasis is on the correlation of the laboratory data with pathophysiology, diagnosis and treatment and biomedical ethics of major disease categories and body systems to include, renal, cardiovascular, hepatic, endocrine, respiratory, CNS, skeletal and areas of neoplasia, trauma, inheritance and pregnancy.
CREDITS: 6.00

HML 3022 - INTRODUCTION TO BASIC HEALTH RESEARCH

The aim of this course is to introduce students to the fundamental principles of research methodology and how these principles are applied for conducting research in health sciences. Students Learn how evidence produced through research is applied to solving problems in everyday health care, and address qualitative, quantitative research issues, as well as the fundamental ethical rules on which health science research is based. Students discuss how to plan and write research studies, including understanding of the supervision process.
CREDITS: 2.00

HML 3102 - CELL PATHOLOGY I

The principles and practices of cellular pathology used in the investigation of disease and disease processes are covered. Instruction will also concentrate on safe working and good laboratory practices. Cell injury, tissue preservation, tissue processing, microtomy, tissue recognition and preparation of tissue samples for diagnosis are introduced. Through laboratory practical instruction, the role and the skills required for the technologist in the cellular pathology laboratory will be learnt.
CREDITS: 2.00

HML 3122 - CELL PATHOLOGY II

Introducing population screening, collection of cytology samples, preparation of cytology samples, staining cells for diagnosis and cell recognition are the topics covered which build on the basic principles introduced in Cellular Pathology I course. Through laboratory practical instruction, the role and the skills required for the technologist in the cellular pathology laboratory will be learnt.
CREDITS: 2.00

HML 3302 - IMMUNOLOGY

Theoretical concepts in immunology and their application in practical techniques used in laboratory medicine are discussed. Topics will include: innate and adaptive immunity; development of the immune system; induction and expression of the immune response; structure and function of antigens and antibodies; antigen-antibody reactions; MHC and aspects of immunology in disease.
CREDITS: 2.00

HML 3913 - CLINICAL PLACEMENT I

Students under the supervision of professional medical laboratory technologists observe and perform routine and specialised medical laboratory procedures, and analysis of laboratory data. Competence levels in medical laboratory procedures are set at the appropriate standard for third year students and teaching, assessment, and evaluation are reflective of the indicated standard.
CREDITS: 4.00

HML 3925 - CLINICAL PLACEMENT II

Students under the supervision of professional medical laboratory technologists perform routine and specialised medical laboratory procedures, and analysis of laboratory data. Competence levels in medical laboratory procedures are set at the appropriate standard for third year students and teaching, assessment, and evaluation are reflective of

the indicated standard.
CREDITS: 12.00

HML 4003 - Biology of Diseases
Introducing the biological principles of human disease and the transition from health to disease are the aims of this course. The course will synthesise the biological (physiological and biochemical) process underlying the clinical manifestations of disease and thereby bring together material from a variety of sources. The clinical relevance, and the laboratory investigation thereof, is stressed by the inclusion of relevant case studies, particularly those prevalent within the region.
CREDITS: 3.00

HML 4004 - Laboratory Management
Introduce students to the concepts of management in the hospital laboratory, and develop skills essential to quality management: individual performance; collective performance within unit of responsibility; and external stakeholders. Students recognise the requirements for good management, organisational excellence and monitoring to benchmark standards. The course will require students to participate in group work (management teams) and will involve problem-solving and role-playing.
CREDITS: 4.00

HML 4005 - Laboratory Methodologies
Introduces the principles and applications of contemporary methodologies used in the analysis of biological materials. The course builds on previous knowledge and experience of routine laboratory methods. Laboratory exercises emphasise instrumentation as aids in diagnosis. Students apply knowledge of instrumentation through performance of practical demonstrations and routine maintenance including near patient testing.
CREDITS: 5.00

HML 4102 - Cell Pathology III
The aim of this course is to emphasise trouble-shooting histochemical methods and advanced techniques used in tissue diagnosis. It introduces immunohistochemistry and quality assurance systems and builds on the basic principles introduced in Cellular Pathology I and II courses. Instruction in the classroom and laboratory will enable the student to review the role of histochemistry in differentiating cellular diseases in the cellular pathology department.
CREDITS: 2.00

HML 4303 - Techniques in Molecular Biology
Introduces a variety of current techniques in molecular biology, with a focus on analysis of nucleic acids: Polymerase chain reaction (PCR), gel electrophoresis and blotting techniques (Northern, Southern), real-time PCR, microarrays (DNA chips), recombinant DNA technology (cloning of DNA fragments), DNA sequencing and methods to study gene function. Manipulation and analysis of gene expression in prokaryotic systems, through eukaryotic tools will be briefly described. Students become familiar with common wet-lab methods used in various fields in biology, and gain an understanding of the objectives, applicability and limitations underlying each of these methods. Students have resources (experience and detailed protocols) to use these molecular techniques in their own research and work environment.
CREDITS: 3.00

HML 4936 - Capstone Project for Medical Laboratory Science
Applying experience that integrates the principles, theories, and concepts of the student's knowledge of problems or issues existing in the health field. The emphasis is on the practical application of the student's career concentration area. The student will work effectively in a biomedical environment, including identification of facilitative and disruptive factors to project progress.
CREDITS: 8.00

HNR 1004 - Integrated Nursing Therapeutics - Fundamentals
Introduction to the theory and practice of nursing to include professional values, nursing skills, and best practice are covered in theory, lab, and clinical practicums. Students demonstrate beginner professional practice in the lab and practicum setting, deliver consistently safe and competent care, and start to develop clinical decision making skills. Theory, lab and practicum are combined to introduce students to basic professional nursing skills and practice in relation to assessment, protection, mobility, nutrition, and hygiene competencies.
CREDITS: 4.00

HNR 1012 - Introduction to Nursing Profession
Students discuss roles and responsibilities, medical law, ethical decision making and current trends and issues in the profession and practice of nursing. Students begin to implement the process of clinical decision making through the utilisation of the nursing process and critical thinking skills. This course therefore aims to give students an understanding of the literature, theories, conceptual frameworks and professional values associated with the profession and practice of nursing.
CREDITS: 2.00

HNR 1102 - Medical Terminology for Nurses

Covers basic medical terminology for nurses, beginning with prefixes, suffixes and word roots used in the medical and health care language. Students build on this knowledge by identifying, analysing, defining, spelling and pronouncing terms and learning abbreviations related to each of the body systems, as well as basic introductory principles of drug administration routes and drug classifications.
CREDITS: 2.00

HNR 1103 - Nursing for Chronic Health Challenges

Promotes critical thinking to assist students in developing sound clinical decision making skills in relation to the provision of nursing care and health promotion for adults experiencing chronic alterations in function across the lifespan. A variety of common and contextual chronic states are explored whilst therapeutic and pharmacological interventions for individuals experiencing such conditions are identified.
CREDITS: 3.00

HNR 1602 - Clinical Pharmacology

Introduces pharmacology and describes the differences between pharmacology, clinical pharmacology, and therapeutics. Topics include: the basic principles of pharmacokinetics and pharmacodynamics; characteristics of an ideal drug; drug administration routes and dose calculation; relevant international and regional legislation; drug development; and classification. Also discussed are adverse drug reactions, drug-drug and drug food interactions, and the drug responses for select groups of patients/clients.
CREDITS: 2.00

HNR 1702 - Microbiology for Nursing

Provides theoretical and practical techniques in the classification, isolation and identification of microorganisms. The course comprises study of the concepts of infection, transmission of disease, pathogenicity, body defense mechanisms, prevention and control of infections. Students acquire an understanding of the purposes of various microbes and the underlying pathophysiology pertaining to select microbial diseases. Instruction in safe work practices and the concept of the need for quality control are integrated parts of the course.
CREDITS: 2.00

HNR 1925 - Integrated Nursing Therapeutics - Chronic Health Challenges

Continues to introduce students to basic nursing clinical skills. Students are expected to acquire intermediate practitioner level skills within a laboratory/clinical setting. Newly acquired knowledge is then applied during a 3-week clinical practicum within a chronic care setting.
CREDITS: 5.00

HNR 2005 - Nursing for Acute Health Challenges

Promotes critical thinking to assist students in developing sound clinical decision making skills in relation to the provision of nursing care and management of adults with acute alterations in function across the lifespan. A variety of common and contextual acute states are explored - including complementary health promotion strategies whilst therapeutic and pharmacological interventions for individuals experiencing such conditions are identified.
CREDITS: 5.00

HNR 2012 - Clinical Drug Calculation

Utilises critical thinking and pharmacological concepts to solve the many types of problems that may be encountered in the preparation of solutions and administration of medications, to include information that is essential to safe, accurate drug calculation in current clinical practice. Problems addressed will move from the simple to the complex. With individualised instruction, students are encouraged to progress at their own rate and to master the skills involved in the calculation of dosages.
CREDITS: 2.00

HNR 2202 - Health Promotion Skills Across the Lifespan

Introduces theory and skills related to professional nursing practice in relation to health promotion and prevention.
CREDITS: 2.00

HNR 2215 - Nursing Care of Family: Maternal, Infant and Child

Students utilise a problem solving approach in the provision and promotion of women and infant health care. Concepts to be explored in this course include: promotion of reproductive health; the physiology of pregnancy; management of low risk pregnancy; management of complications associated with pregnancy, labour and childbirth; and care of the newborn infant. Therapeutic and pharmacological interventions associated with health, wellness and management of conditions or disorders are identified.
CREDITS: 5.00

HNR 2905 - Integrated Nursing Therapeutics - Medical Surgical Nursing

Introduces intermediate clinical skills pertaining to the nursing care and management of individuals with acute health challenges. Students will be exposed to a variety of procedures including: the safe administration of oral, topical and inhalation medications; the administration of parenteral medications; wound management, and the management of casts, braces, skin and skeletal traction. This integrated course will conclude with a clinical practicum within a medical/surgical clinical setting.
CREDITS: 5.00

HNR 2924 - Integrated Nursing Therapeutics - Family, Maternal, Child

This is an intermediate advanced level course studying the skills for the care of newborn and clients, including: the management of clients undergoing diagnostic/therapeutic procedures; care of mother and foetus during the perinatal period; application of knowledge and skills pertaining to the care and management of a newborn; and understanding and skills pertaining to the care and management of hospitalised paediatric clients. This integrated course will conclude with a clinical practicum within the newborn/paediatric setting.
CREDITS: 4.00

HNR 2934 - Integrated Nursing Therapeutics - Mental Health Nursing

Students will apply mental health nursing knowledge, including decision making and critical thinking skills, and beginner practitioner skills pertaining to the care and management of individuals with a variety of mental health problems. This integrated course concludes with a clinical practicum within a psychiatric clinical setting.
CREDITS: 4.00

HNR 3003 - Mental Health Nursing

Develops fundamental knowledge, skills and attitudes relevant to the restoration and maintenance of optimal mental health and recovery from mental illness. Presents the scientific basis of disease for a collection of conditions and disorder types including: anxiety; depression; mania; schizophrenia; anorexia nervosa; substance abuse; and survivors of violence or abuse. Develops introductory skills integral to the assessment of mental health disorders and the evaluation of coping abilities.
CREDITS: 3.00

HNR 3013 - Leadership and Quality Management in Nursing

Introduces concepts related to leadership and quality management in nursing. Addresses decision-making, problem finding and solving, communication, coordination, and planning skills needed in the current healthcare arena. Includes management of human and non-human resources. The focus recognises change as transformative and pervasive.
CREDITS: 3.00

HNR 3204 - Public Health Nursing

Explores theoretical frameworks and health care policies that underpin community health nursing and relates them to lifestyle challenges faced by individuals, families and groups. Encourage students to apply a community oriented, evidence-based approach with emphasis on contextual, health promotion and disease prevention. This course is complemented by regular community visits which encompass the undertaking of community health needs assessments followed by implementation of appropriate and culturally sensitive, health promotion strategies.
CREDITS: 4.00

HNR 3603 - Introduction to Nursing Research and Evidence Based Practice

Introduces the research process and explores naturalistic (qualitative studies) and traditional scientific research (quantitative studies). Develops skills to critically read and analyse the strength and weaknesses of sample research studies and introduces the critical steps related to the development of a quality research project.
CREDITS: 3.00

HNR 3904 - Integrated Nursing Therapeutics - Public Health

The aim of this course is to synthesis community based nursing and community/public health nursing with the goal of promoting and preserving the health of populations. It also recognises that community health practice is responsible to the community as client with services provided to individuals, families and groups to promote health and prevent disease. Students will apply knowledge and skills from nursing and public health sciences to expand their understanding of caring for a community's health.
CREDITS: 4.00

HNR 3916 - Integrated Nursing Therapeutics - Emergency and Critical Care

Expands knowledge and skills of health assessment applied to the care of patients who present to an emergency department or are critically ill. Includes an extensive assessment component such as arterial blood gas analysis, chest radiography, cardiac electrophysiology, cardiac monitoring and respiratory

assessment. Addresses concepts such as airway management, modes of ventilation, and management of patients on inotropes. Concludes with a practicum within the emergency/critical care area.
CREDITS: 6.00

HNR 4003 - Nursing Scholarship and Evidence Based Project I

Further develops the concepts learned in Introduction to Nursing Research and Evidence based Practice course. Students create a research proposal which is a pre-requisite for Nursing Scholarship and Evidence Practice II courses in semester 8.
CREDITS: 3.00

HNR 4016 - Nursing Care of Clients with Complex Health Challenges

Further develops nursing knowledge and critical thinking skills whilst utilising a problem based learning approach through exploration of common, complex health challenges. Technical, scientific, interpersonal and clinical decision-making skills are also further developed whilst legal and ethical issues are debated. Students apply concepts and skills related to the care and management of individuals with acute and/or complex alterations in function in the health care setting.
CREDITS: 6.00

HNR 4903 - Nursing Scholarship and Evidence Based Project II

Further develops the concepts learned in Nursing Scholarship and Evidenced based Project 1 courses. Students collect data in the clinical/health industry area. Data are processed and findings are articulated in a final research report.
CREDITS: 3.00

HNR 4910 - Transition to Professional Nursing Practice

Explores current factors that impact the transition from student to the licensed professional nurse. Students examine and apply leadership and management principles in acute and chronic healthcare settings with a focus on safe, ethical, and quality patient care. Students will use an inter-professional approach to coordinate care for a group of patients.
CREDITS: 10.00

HPH 1204 - Foundation Chemistry for Pharmacy

Develops learning on subatomic/atomic and periodic properties, chemical bonding, structural features, physical chemical properties and molecular interactions; acid/base, complex formation, precipitation and oxidation/reduction chemical equilibrium reactions of pharmaceutical interest, chemical nomenclature and concepts of chemical reactions and effective problem solving in the laboratory.
CREDITS: 4.00

HPH 1504 - Introduction to Pharmacy

Generates understanding of the history and evolution of pharmacy industrial practice areas, drug sources and stages of development of drug products from source to final dosage form, drug classification, nomenclature, legislation, routes of administration and dosage forms, reading, interpretation, appraisal and process of prescriptions and labels for dispensing.
CREDITS: 4.00

HPH 2002 - Pharmaceutical Microbiology

Examines the nature of microorganisms and their roles in causing disease and spoilage of pharmaceuticals; microbiological laboratory procedures and assays, chemical agents and physical procedures used to control/kill microorganisms, sterilisation techniques, sterilants, disinfectants, antiseptics, preservatives; therapeutic agents and their use for major infectious diseases; resistance to antimicrobials; aseptic/ sterile processing and preservation of pharmaceutical products, the use of clean rooms and the microbiology of GMP sterile manufacture.
CREDITS: 2.00

HPH 2004 - Biological Organic Chemistry

Develops the knowledge and analytical skills required to understand the structure and reactivity of alkanes, alkenes, alkynes, cyclo/aromatic hydrocarbons, alcohols, phenols, thiols, ethers, aldehydes, carboxylic acids, esters, amines and amides; molecular properties and physiological roles of carbohydrates, amino acids-proteins-enzymes-co-enzymes and co-factors; nucleic acids and lipids; cycles of transformation of matter and energy production; bio-chemical basis of biological functions and illnesses, and the effect of these organic compounds on biological systems.
CREDITS: 4.00

HPH 2103 - Immunology

Introduces the complexity, role and process of non-specific and specific immunity. Examines the principles of passive and active immunization, including benefits and risks. Develops understanding of the fundamental immunological principles that impact on disorders related to excessive or abnormal immune responses, the process and control of Graft versus Host reactions and the principles of immunotherapy, including the use

of medicinal therapy in autoimmune diseases.
CREDITS: 3.00

HPH 2204 - Medicinal Chemistry I
Develops knowledge of the molecular properties of drugs, including acid-base characteristics, polarity, solubility and partition between phases, stereo-specificity and selectivity; biopharmaceutical features: absorption, transport, distribution, intermolecular interactions and receptor binding, biotransformation and elimination, and how these properties impact on the application these drugs in a therapeutic setting. The course also introduces the dynamics and kinetics of quantitative degradation; drug classification according to sources, therapeutic use and structural features.
CREDITS: 4.00

HPH 2303 - Pharmaceutics I
Development of the fundamental skills required to undertake pharmaceutical calculations, including the use of the International System of units; density, specific gravity and specific volume; expressions of concentration, altering the product strength, methods of pharmaceutical measurement and weighing; dosage calculations; administering intravenous infusions and parenteral admixtures, and including calculations in contemporary compounding.
CREDITS: 3.00

HPH 2405 - Pharmacology
Introduces the basic principles of pharmacokinetics and pharmacodynamics, neurotransmission, chemical mediators which cultivates students' knowledge in drug site targets through the pharmacology of the autonomic nervous system, and drug therapy in high risk groups.
CREDITS: 5.00

HPH 3013 - Pathophysiology and Therapeutics I
Advances essential knowledge required to make judgments in regards to the effects, therapeutic rationale and selection of drugs for specific disorders. Students will develop knowledge and understanding about the disorders of the central nervous and respiratory systems. In addition, the effect of drugs with specific actions on smooth muscle, joints and those agents used in the management of pain are examined.
CREDITS: 3.00

HPH 3023 - Medicinal Chemistry II
Explores the phases, technologies and methods of discovery, design and development of chemical drugs and natural products. Helps students to know about the molecular factors affecting the modes of formulation, delivery and interactions with biochemical systems, transporters, receptors and metabolism, drug stability and kinetic behaviour in medicines.
CREDITS: 3.00

HPH 3033 - Pharmaceutics II
Develops the skills to examine key physical-chemical and mathematical concepts to interpret the properties of solutions. The laboratory section provides opportunities to develop practical competencies in formulation, packaging, labeling and presentation procedures of pharmaceutical solutions. Students are expected to understand and discuss the effect of physical-chemical properties of drugs, dosage forms and route of administration on the rate and extent of drug absorption.
CREDITS: 3.00

HPH 3103 - Pharmaceutics III
Highlights important pharmaceutical/biopharmaceutical and mathematical principles which are essential to product design, development, presentation and testing of liquid, semi-solid and solid pharmaceutical dosage forms. The laboratory components help students to develop practical capabilities in compounding, packaging and testing dosage forms that are directly applicable to the manufacturing procedures of pharmaceuticals.
CREDITS: 3.00

HPH 3123 - Pharmaceutical Analysis
Covers the theory and practice of wet chemical, chromatographic and spectroscopic methods of chemical analysis; the control of quality during drug analysis (instrumentation, reagents, limit test, standard solutions, sampling, calculations of results and errors, and general operations); statistical treatment and interpretation of experimental data. Students will be expected to perform assays based upon knowledge of general, special, physical, and chemical concepts of analytical procedures.
CREDITS: 3.00

HPH 3163 - Pathophysiology and Therapeutics II
The focus is on pathophysiology and applied therapeutics of common chronic and acute cardiovascular conditions, including Hypertension, Heart Failure, Ischemic Heart Disease, Atherosclerosis and Vascular Obstructive Disease, Angina Pectoris, Myocardial Infarction and Acute Coronary Syndrome. The role of evidence-based medicine in determining therapeutic decisions is emphasised, and builds upon the basic pharmacological and pharmaceutical sciences. Developing pharmaceutical care plans that build skills for recommending therapy, evaluating and

monitoring the efficacy and safety of medications for an individual patient is also emphasised. The course introduces blood drugs (e.g., platelet inhibitors, anticoagulants, thrombolytic agents) with emphasis on the pharmacist's role in selecting the most appropriate drug, individualising dosages, and monitoring patients.
CREDITS: 3.00

HPH 3904 - Community Pharmacy Preceptorship I

Develops students' experience as professional pharmacists in a private community/retail pharmacy setting. Students are required to perform the role of the community pharmacist. The course utilises students theoretical and laboratory knowledge in the evaluation of over-the-counter (OTC) products for the treatment of common ailments (e.g., colds, headaches etc.). Students also develop practical knowledge of dermatological conditions; ophthalmic and optic preparations; herbal and complementary medicines; and vitamin and nutritional supplements.
CREDITS: 5.00

HPH 3954 - Clinical Pharmacy Preceptorship I

Facilitates experience in providing patient-centred pharmaceutical care in hospital outpatient and inpatient settings. The course develops medication management and use competencies, and fundamental skills in medication therapy and medication management, in addition to learning effective professional communication skills in conjunction with prescribing physicians and third party payers to manage medication-related problems.
CREDITS: 5.00

HPH 4003 - Bio-Technology

Enhances the knowledge and understanding of major bio-technology techniques which include rDNA, Hybridoma Technology (Monoclonal Antibodies), Antisense Technology, PCR, Genomics, Proteomics, Gene Therapy, Transgenics, Glycobiology, Cloning, Peptidomimetics and specific preformulation procedures. Familiarises students with parenteral, oral and specialised delivery procedures of biotech products and the impact of biotechnology on pharmaceutical care.
CREDITS: 3.00

HPH 4013 - Complementary Medicine

Develops the role of the pharmacist in providing medication therapy management services focused upon the safe, appropriate, and effective selection, use, and monitoring of non-prescription, herbal, nutritional and other alternative/complementary medication therapies as well as prevention of health risks and fostering a healthy lifestyle.
CREDITS: 3.00

HPH 4023 - Clinical Biochemistry and Toxicology

Develops an in-depth knowledge of interpretation of clinical laboratory investigations of body fluids, and the correlation of these results to biochemical changes associated with specified disorders. The course also focuses on the application of basic toxicological principles to an initial approach for the management of a poisoned patient; assessment of the degree of toxicity of selected therapeutic and non-therapeutic agents; followed by possible treatment strategies.
CREDITS: 3.00

HPH 4073 - Pathophysiology and Therapeutics III

Introduces students to the main concepts of pathophysiology and principles of antimicrobial chemotherapy, antineoplastic and immunomodulating drugs. Students apply the appropriate therapeutic management of infectious liver and gastrointestinal tract diseases based on the pharmacological features of drug entities.
CREDITS: 3.00

HPH 4102 - Pharmaceutical Care

Extends students' concepts, principles and functions of the general framework and the systematic method for the process and application of pharmaceutical care, critical thinking and problem-solving skills. The course requires students to assess, resolve and monitor patients drug-therapy needs and problems with a commitment to improving patient treatment outcomes.
CREDITS: 2.00

HPH 4112 - Research Project for Pharmacy

Develops and applies the techniques arising from the theoretical knowledge learned, demonstrating high-level research competencies in a field of study related to pharmacy. The course requires students to prepare a research topic, write a research protocol, conduct research, evaluate and interpret data and present findings.
CREDITS: 2.00

HPH 4904 - Clinical Pharmacy Preceptorship II

Provides opportunities to consolidate pharmaceutical practice competencies at patient-centred pharmaceutical care in outpatient and inpatient settings. Students will apply the knowledge and principles of fundamental practice skills by providing pharmaceutical care with the goal of optimising patient care and inter-professional relationships. An expansion of general ability-based

and professional practice-based competencies along with advanced effective clinical decision making skills, through continuous education and practice, will be established.
CREDITS: 5.00

HPH 4924 - Community Pharmacy Preceptorship II
Through the advanced community Pharmacy Practice rotation provides opportunities for students to enhance their practical experience in various aspects of community pharmacy practice. This may include, but is not limited to, provision of products, clinical pharmacy services, and pharmacy management.
CREDITS: 5.00

HPH 4952 - Industrial Pharmacy Preceptorship
Generates student knowledge in various activities of the drug manufacturing industry, such as research and development, manufacturing, quality control, clinical testing, information support, marketing, and regulatory affairs. This course provides opportunities where the student can learn about responsibilities of the industrial pharmacist and also about the variety of career opportunities in the pharmaceutical industry. Students with an interest in an industrial pharmacy career can use this rotation opportunity to explore, focus and refine their career goals.
CREDITS: 2.00

HSC 1003 - Introduction to Health Care Systems
Explores the organisation of health care delivery systems in the UAE. Examinee health care system components and major influences on health care organisation. Explores different health care systems in societies around the world and identifies the common challenges they face.
CREDITS: 3.00

HSC 1103 - Anatomy & Physiology I
Provides an introduction to basic anatomy and physiological principles from the cellular level to the whole organism. These topics will include anatomical terms, the function and properties of selected biological molecules, cellular structure and processes, organisation of the human body, the principles of homeostasis and the structure and function of the urinary, digestive and musculoskeletal systems. A laboratory component will allow students to explore physiological concepts through a range of laboratory based activities.
CREDITS: 3.00

HSC 1203 - Anatomy & Physiology II
The second course in a two-semester sequence designed to build upon certain concepts covered in the Anatomy and Physiology I course. The aim is to extend the students understanding of the workings of the body systems and the communication processes required to coordinate their activities.
CREDITS: 3.00

HSC 1233 - Human Growth and Development
Examines human growth and development across the life span. Studies growth and development with an emphasis on biological development, health and health promotion. Explores health choices and health issues.
CREDITS: 3.00

HSC 1803 - Medical Terminology for Health Sciences
Covers basic medical terminology beginning with prefixes, suffixes and word roots used in medical and health care language. Develops knowledge by identifying, analysing, defining, spelling and pronouncing terms and learning abbreviations related to each of the body systems, as well as the basic introductory principles of drug administration routes and drug classifications.
CREDITS: 3.00

HSC 2203 - Psychology
Psychology is the scientific study of the human mind and behaviour. This course aims to provide an overview of the field of psychology to enable students to gain functional understanding of the human mind and behavior, and apply this knowledge to their field of work.
CREDITS: 3.00

HSC 2333 - Sociology
Provides an overview of the study of human society, groups, social processes, and sociological thinking. Activities include active analysis of social issues using sociological theories. Develops sociological imagination and analytic understanding of social structure, agents of socialisation, inequality and change.
CREDITS: 3.00

HSW 1003 - Introduction to Social Work
Introduces the values, ethics, history and theory central to social work practice. Develops an understanding of social work methods applicable to systems of all sizes within the framework of a person in environment perspective. Introduces and discusses social work roles and career paths.
CREDITS: 3.00

HSW 1023 - Basic Counselling Skills

Introduces the basic techniques required for effective communication and interviewing. Topics include: active listening skills; questioning and interviewing skills; empathy; the influence of culture on communication; and the importance of self-awareness. Develops skills in analysing communication events, through observation or involvement, and implementation of behaviours for successful responses.
CREDITS: 3.00

HSW 1033 - Social Diversity and Justice

Focuses on issues of diversity and social justice. Develops techniques to identify social justice issues and develop communication skills to successfully deal with clients experiencing such issues. Also examines the impact of diversity on client populations, identifying strengths in these populations and examining own values, beliefs and behaviours towards diversity.
CREDITS: 3.00

HSW 1203 - Social Work in the UAE

Examines the roles and responsibilities of Social Workers in the UAE. Analyses problems resulting from living in both Emirati and expatriate populations and uses suitable intervention strategies.
CREDITS: 3.00

HSW 1213 - Abnormal and Clinical Psychology - Psychopathology

Introduces common types of behavioural disorders and theoretical approaches to diagnosis and treatment. Applies skills learned to locate and use major classification systems for behaviour disorders. Applies skills learned to individuals living in a specific type of population, to identify mental dysfunction and its complex causes and manifestations.
CREDITS: 3.00

HSW 1243 - Foundation in Case Work

Introduces the knowledge and skills necessary for professional social work practice. Develops an understanding and application of social work methods to small system case samples. Also deals with the development of written goal setting strategies, interventions and evaluate potential outcomes. Specific emphasis is given to the theoretical underpinnings of systems ecological framework and the problem solving process.
CREDITS: 3.00

HSW 2023 - Advanced Counselling in Social Work

Expands knowledge and skills of effective communication and counselling interventions fundamental to social work practice. Demonstrates and practices communication strategies to establish and maintain therapeutic relationships and assessment techniques. Additionally, in tandem with systems theory, the integration of other counselling approaches as part of a planned change process is achieved.
CREDITS: 3.00

HSW 2033 - Laws and Ethics in Social Work in the UAE

Develops an increased understanding of the values and ethics that shape social work practice: recognising ethical issues; developing skills in applying an ethical legal framework to guide practice decisions; and enhancing use of critical thinking skills to address issues and dilemmas faced in practice. Particular attention is paid to the International Social Work Code of Ethics and its application to social work practice in the UAE. Course delivery includes some Arabic instruction to clarify specific UAE laws that relate to social policy and social work practice.
CREDITS: 3.00

HSW 2043 - Populations at Risk 1: Family and Children

Extends and applies knowledge and skills gained in earlier social work courses to specific populations. Increases knowledge of dynamics and risk factors unique to families and children. Applies systems theory to specific case examples and utilises systems theory/ family systems theory as a way to guide practice interventions.
CREDITS: 3.00

HSW 2123 - Human Behaviour and the Social Environment

Develops knowledge of human behaviour in the social environment. Applies social systems and life span approaches to aid understanding of human behaviour and the impact of the environment. Develops the ability to view individual, family, group, and community problems within their environmental context, as well as the way people and environments reciprocally impact each other. Develops the ability to examine societal theories of human development and human systems and their relevancy for social work practice.
CREDITS: 3.00

HSW 2233 - Foundation in Group Work

Introduces social group work, or mezzo level practice. Develops the ability to identify and learn skills needed to work with both task and treatment groups and differentiate the social worker's roles and responsibilities

with each. Knowledge of group development, stages, dynamics, processes and skills needed to advance the goals of individual members and a group as whole within a systems ecological context is acquired.
CREDITS: 3.00

HSW 2243 - Populations at Risk 2 : Aging, Special Needs

Extends and applies knowledge and skills gained in earlier Social Work courses to specific populations. Increases knowledge of dynamics and risk factors unique to aging and persons with special needs. Applies systems theory to specific case examples and utilises systems theory/family systems theory as a way to guide practice interventions.
CREDITS: 3.00

HSW 3033 - Advanced Group Work

Expands knowledge of social group work or mezzo level practice. Builds on knowledge of group development, dynamics and processes,as students apply knowledge and skills in class group work and group facilitation. The impact of diversity on group dynamics and processes are discussed and explored.
CREDITS: 3.00

HSW 3043 - Advanced Case Work

Builds on skills learned in Foundation of Case Work. Further develops knowledge and skills of culturally competent interviewing techniques. The ability to evaluate and practice the assessment process, goal setting and intervention implementation through role plays and group activities is further developed. Ongoing emphasis is given to systems ecological framework and the problem solving process. Course delivery techniques include the use of Arabic to assist students in learning and using relevant interviewing skills with future UAE clients.
CREDITS: 3.00

HSW 3223 - Social Work Action and Advocacy

Continues to build micro, mezzo and macro practice skills needed to work with systems of all sizes. Evaluates the impact of social policy on an individual, community, societal and global level and develops ways to ethically advocate for options, services, resources and resource development. Particular emphasis is given to social work tools of advocacy, negotiation, brokering and mediation as ways to promote planned change with and on behalf of clients.
CREDITS: 3.00

HSW 3513 - Family Systems and Counselling

Utilises family systems theory to explore family structure, dynamics and interactions. Structural, communication and behavioural approaches to family therapy and treatment as well as continued emphasis on the problem solving approach are presented and applied as culturally relevant models. Course delivery techniques include the use of Arabic to assist students in learning and using relevant counselling techniques with future UAE clients and families.
CREDITS: 3.00

HSW 3913 - Social Work Practicum I

Provides an opportunity to integrate theory and practice learned in coursework in social work practice placement. Modelling professional social work skills, values, ethics and behaviours through placement in a college approved agency for 96 hours during the semester is expected. Utilising supervision and evaluation of own strengths, limitations and use of practice skills through written self-reflections completed in Arabic is delivered. Completion of a written agency assessment of the agency's mission, structure, client base and funding sources is required.
CREDITS: 3.00

HSW 3963 - Social Work Practicum II

Provides an opportunity to integrate theory and practice learned in coursework in social work practice placement. Modelling professional social work skills, values, ethics and behaviours through placement in a college approved agency for 96 hours during the semester is expected. Utilising supervision and evaluation of own strengths, limitations and use of practice skills through written self-reflections completed in Arabic is delivered. Completion of a written agency assessment of the agency's mission, structure, client base and funding sources is required.
CREDITS: 3.00

HSW 4013 - Research Methodologies for Social Work

Introduces the importance of reading, understanding and locating research to evaluate and inform social work practice. Develops a basic understanding of scientific processes involved in research, as well as an understanding of research related concepts, terms and theory. Creates an awareness of the types and sources of social work literature.
CREDITS: 3.00

HSW 4023 - Advanced Community Organisations

Extends knowledge of community organisation and planning models and evaluates their impact on social functioning. Develops the ability to analyse skills and

strategies needed to successfully conduct community needs assessments. Applies the problem solving process and techniques with larger system issues or problems.
CREDITS: 3.00

HSW 4213 - Capstone Research Project
Provides an opportunity to study UAE social problems, issues or problem interventions or some aspect of UAE social policy and their impact on populations or client issues. Utilises knowledge learned in Research Methodologies to select an area of interest, choose appropriate methodology, collect and analyse data and present conclusions in a final capstone presentation.
CREDITS: 3.00

HSW 4223 - Social Work Administration
Builds on mezzo and macro level knowledge necessary for social workers to successfully work in and provide leadership to their agency/organisational settings. Develops knowledge of social agency structures, roles and the functions of administrators. Analyses the impact of social welfare policy, funding, agency mission and structure on service delivery.
CREDITS: 3.00

HSW 4233 - International Social Work - United Nations and other International Agencies
Explores the historical development and current trends in the field of international social work. Develops an ability to analyse the role of the United Nations and its impact on international social work. Explores other international agencies and examines current and emerging roles for social workers in these organisations. Emphasises the impact of social policy on international agencies within a systems context.
CREDITS: 3.00

HSW 4916 - Social Work Practicum III
Provides an opportunity to integrate theory and practice learned in coursework in social work practice placement. Modelling professional social work skills, values, ethics and behaviours through placement in a college approved agency for 96 hours during the semester is expected. Utilising supervision and evaluation of own strengths, limitations and use of practice skills through written self-reflections completed in Arabic is delivered. Completion of a written assessment of the agency's mission, structure, client base and funding sources is required.
CREDITS: 6.00

HSW 4966 - Social Work Practicum IV
Integrates theory and practice learned in coursework in actual social work practice settings, as well as selects an area of interest to research and investigate. Modeling professional social work skills, values, ethics and behaviours through placement in a college approved agency for 192 hours during the semester is expected.
CREDITS: 6.00

LOG 1003 - Logistics Principles and Supply Chain Management
Provides a general overview of logistic elements. Exposure to manufacturing, trade and logistics service sectors, forwarding and transportation, logistic flows, and networks under cost and performance aspects will reinforce fundamental concepts. Provides opportunities to enhance knowledge and skills in analyses and project management through selected case studies.
CREDITS: 3.00

LOG 1103 - Enterprise Information Management
Develops practical skills needed for study as well as for later employment. Students learn to manage enterprise data with a spreadsheet software (MS-Excel®) and with a database software (MS-Access®). Skills are developed through reading and many practical exercises using transparencies, a script, online materials and MS-Excel® and MS-Access® example files. Passing this course is a requirements for the attendance of the course »Telematics in Logistics»».
CREDITS: 3.00

LOG 1203 - Business Administration I
Introduces the fields of macro and micro economics and explains their relevance to Business Administration. Focuses mainly on microeconomics and on how people make economic choices and how they behave in markets. Examines: consumer demand; price elasticity; pricing behaviour; production and costs; how suppliers and consumers interact in markets; competition; monopoly and oligopolies; and cases of market failure including asymmetric information, public goods and externalities.
CREDITS: 3.00

LOG 2003 - Transport General Basics and Technologies
Provides an overview of the characteristics of transportation systems. Illustrates the basic interdependence between land use and transportation and describes how transportation users interact with vehicles and the transportation facilities they use. Focuses on highway operations, and examines the fundamental uninterrupted traffic flow equation and involves the evaluation of operational performance for a segment of highway.
CREDITS: 3.00

LOG 2013 - Strength of Materials
Examines the basic principles of mechanics/statics including the composition and resolution of forces. Consideration is given to the properties of cross-sections of simple geometric shapes. Introduces the strength of materials concepts necessary for the design of structural elements: determine stresses and strains and applying Hooke's law; construct shear force and bending moment diagrams for simple structural systems; and determine bending stresses.
CREDITS: 3.00

LOG 2103 - Global Energy and Environmental Technology
Examines relevant environmental technologies such as waste disposal and recycling and the co-links between energy technologies, environmental and economic effects. Logistical technologies of supply and waste management are learned. Identifies problems and the use of strategies based on structured lists of criteria.
CREDITS: 3.00

LOG 2203 - Materials Handling Technologies and Automation
Provides basic understanding of concepts and technologies to handle materials in flow systems. Introduces basic components of technical systems such as breaks, engines, ropes and chains core elements of material flow systems. Special attention is paid to packaging systems, conveyors, cranes and vehicles, warehousing and order picking systems, and physical interfaces between them. Fundamentals of automation technology are applied to materials handling in order to understand how automatic materials handling systems work and when automation makes sense.
CREDITS: 3.00

LOG 2303 - Telematics in Logistics
Introduces basic communication technologies, the application of different methods of system analysis to real life situations, and the development of a simulation model for an RFID application. Skills are developed through reading and many practical exercises using online materials and example files.
CREDITS: 3.00

LOG 2402 - Business Administration II
Introduces the reasons behind, and issues relating to, people's behaviour within an organisation and the processes of organisational change. Defines organisational behaviour and its importance. Explores motivation, leadership, group behaviour, cultural issues, organisational change and conflict and power in organisations. These issues are looked at within the context of organisations generally and those within the UAE specifically. Applications of organisational improvement help to synthesise these principles.
CREDITS: 3.00

LOG 3003 - Maritime Transport
Develops familiarisation with current maritime transportation concepts from a geographic point of view. Elaborates on the transportation practices of businesses in the competitive environment of EU, CR and of world markets. The goal is also to gain ability to use the knowledge effectively in an enterprise management.
CREDITS: 3.00

LOG 3103 - Specification of Technical Systems
Introduces the main aspects of purchasing and selling complex technical products and services. Explains how to analyse, structure and describe complex technical systems. Projects are organised as a role playing game featuring representatives of ordering and selling companies or institutions.
CREDITS: 3.00

LOG 3203 - ERP I Principles
Introduces ERP in modern business management: the basic concepts; applications; and their significance in business development. During the course students will work with reference models, acquire knowledge of possible solutions and action models for the development, adaptation and implementation of standard application systems. Focuses on financial modules, reporting, materials management and sales capabilities.
CREDITS: 3.00

LOG 3302 - Sales and Distribution in Logistics
Examines the management of the flow of goods (inventory), services, and related information among members in the supply chain (i.e., suppliers, manufacturers, distributors, retailers, logistics service providers and the end customer). Provides up-to-date knowledge and modern know-how on planning, designing and controlling the flow of physical goods to a market, along with the information and service necessary to meet customer demand.
CREDITS: 2.00

LOG 3403 - Transport and Economic Geography
Geography and transportation intersection in terms of movement of people, goods, and information. Commuting, supplying energy needs, distributing goods, and acquiring personal wants. Examines the

need for developing sufficient transport networks to meet growing economic development and mobility needs. Explains location theory and the rationale for the location of industry, cities, and systems in their current location. Develops an understanding of the role played by geography and geographic barriers, and of the spatial location aspects of the solutions to economic problems devised by societies.
CREDITS: 3.00

LOG 3503 - Planning of Warehouse Systems

Addresses problems in warehouse design in a holistic approach. Understand specific requirements of warehouses and their design. Know and apply procedure, methods, tools for warehouse design and analysis. Select and apply suitable methodologies and strategies to develop a technical solution for a warehousing problem. Evaluate different alternatives and select the warehousing solution to be implemented. Elaborate solid arguments to convince and motivate decision makers. Run and manage warehouse design projects in a market setting.
CREDITS: 3.00

LOG 3602 - ERP 2 Applications

Understand Enterprise Resource Planning (ERP) system in integrated software with applications in all business areas of an organisation including: accounting and finance; HR; sales and distribution; production; purchasing; and inventory. Deal with ERP theory and practice including the role of ERP in business process improvement, comparison of ERP and ERP2, ERP functionality and risk issues.
CREDITS: 2.00

LOG 3702 - Logistics Controlling

Examines tasks of logistics, supply chain management, logistics and controlling the supply chain. Works with case studies in writing and templates to provide solutions. Solve problems using different software products. The application of methods and techniques of management accounting can be learned in the field of logistics and supply chain management.
CREDITS: 2.00

LOG 4002 - Work Experience

Students gain relevant engineering experience in an actual working environment in order to provide an opportunity to develop and apply professional work ethics and practices. Transfer of engineering skills learned at the college to the workplace is a major feature of this course.
CREDITS: 4.00

LOG 4003 - GIS in Logistics

Equips students with the required knowledge and skills to use GIS technology to track daily fleet movements and maintenance schedules efficiently, without compromising quality customer service. Explains how GIS can provide a platform for integrating data from existing workforce, fleet, and customer management systems so the company can get the most out of its IT investment.
CREDITS: 3.00

LOG 4103 - Dangerous Goods

Learn how to identify and assess risks when dealing with hazardous goods and materials. Design appropriate measures of loss prevention and limitation of loss. Apply such measures in practice, and harmonise them with modern environmental, health-protection and safety systems. Explain the relation between safety and quality management systems and understand principles of legislation and legal norms related to transport of dangerous goods by sea, road and air.
CREDITS: 3.00

LOG 4203 - Port Management

Learn about the business aspects of harbour-management and cargo-handling. Covers key issues and principles of implementation of logistics planning structures in harbour areas. Logistics interfaces to other transport systems (rail, road, water transport, air) are included. Additionally, the planning principles of ports, the cost and performance developments in ports are key issues. Examples of harbour infrastructures and the customer relations in different ports are also examined.
CREDITS: 3.00

LOG 4303 - Airport Management

Provides a fundamental understanding of the broad aspects of managing airports and the basic logistics concepts behind air cargo systems. Includes options of strategic decision-making in airport and air cargo management. Presents a short introduction of the major legislation affecting aviation, and the rules and regulations governing airport operations. Additional topics studied include: air traffic control; terminal-management; and ground infrastructure of airports; and introduction to planning and running of air cargo systems.
CREDITS: 3.00

LOG 4403 - Road and Rail Freight

Examines transport economics and the requirements for cost accounting in road and rail freight. The development from transport to traffic and logistics is of great importance here. Develops knowledge of business

impacts on the cost accounting and the application of established methods to estimate operating efficiency and measure success. Introduces the structure of transportation markets, and the economic and ecologic challenges involved in these transport types.
CREDITS: 3.00

LOG 4503 - Public Transport
Focuses on the particularities of transport economics and the requirements on cost accounting in the public transport sector. Discusses the planning, building and maintenance of public traffic areas. Examines the planning of route networks and time schedules for public transportation. Develops an understanding of pricing, ticketing and the economics of timetables which are also essential for public transport.
CREDITS: 3.00

LOG 4603 - Airline Management
Develops an understanding of airline management decision processes, with an emphasis on economic issues and their relationship to operations planning models and decision support tools. The application of economic models of demand, pricing, costs, and supply to airline markets and networks are covered. Other aspects include industry practice and emerging methods for fleet planning, route network design, scheduling, pricing and revenue management and interactions between the components of airline management and profit objectives in competitive environments.
CREDITS: 3.00

LOG 4703 - Management of Distribution Networks
Implementation of concepts, forging plans, steering and optimising global distribution networks. Modern collaboration concepts to assess feasibility and consider implementation hurdles. Conditions of distribution network transformation. Analysis and evaluation of value chains in different contexts and the current challenges of the management of global value will also be taught in this course. Practice works with SCM Systems like SAP SCM complete the course.
CREDITS: 3.00

LOG 4803 - National Transport and Planning Law
Examines the basics of national and international transport and insurance law. Analyses the evaluation and negotiation of logistics contracts. Introduces transportation legislation, contract law, contract of sale, dispatch, incomers. Discusses obligations and rights of the sender and obligations and rights of the carrier. In the air transport rules, the students are introduced to the Warsaw- and the Montreal-conventions.
CREDITS: 3.00

LOG 4904 - Internship
Involves a significant level of student independence in that there are no class lectures. Students write assignments intended to develop their practical skills and to reflect on their study experience. The bulk of the course is built around working with a government agency, interest group, or non-governmental organisation (NGO) over a specified period of time.
CREDITS: 4.00

LOG 4912 - Capstone Thesis Project
Builds on significant analytical work and consists of a comprehensive written final product. Detailed requirements are determined by the faculty member and can take a wide range of forms, like a development plan, a case study or a business plan. The capstone project enables students to apply and synthesise the material learned at GUCL-courses, and develop expertise on a specific topic related to logistics. Students are required to work closely with experts in the field of study.
CREDITS: 12.00

LSC 1103 - Academic Reading and Writing I
First semester BAS course focusing on basic research and academic reading and writing skills. Connects reading to vocabulary acquisition and to the production of academic-style essays containing references. Students apply techniques such as brainstorming, organising and planning to generate ideas, as well as drafting, revising, editing and proofreading written work.
CREDITS: 3.00

LSC 1503 - Academic Spoken Communication
Students explore the use of spoken English in academic and professional contexts. They analyse extended formal speech as well as mini-lectures,and identify non-verbal features such as emotions from both linguistic and non-linguistic clues. Students then apply the knowledge gleaned to take part in discussions and other spoken activities, such as creating and delivering presentations, delivering public speeches, and participating in interviews.
CREDITS: 3.00

LSC 2103 - Academic Reading and Writing II
Fourth semester BAS course focusing on refining the skills needed for understanding longer texts and developing academic integrity and competency in writing academic English on a researched topic to a professional standard. Students interpret information

and argument provided in longer academic texts and produce written English which successfully demonstrates their critical understanding of a topic and clear use of academic honesty principles using standard APA guidelines.
CREDITS: 3.00

LSC 2183 - English for Specific Purposes

Designed to improve the oral and written English communication skills of students studying degree programmes in Engineering, Health Sciences, IT, Applied Media and Business. Using input from texts, videos, and audio materials on a range of topics related to their programme studies, students actively participate in engaging work-related discussions and decision-making tasks with a strong focus on professional language use.
CREDITS: 3.00

LSH 2143 - Leadership Communication

Analyse and discuss the meaning of leadership and the leadership styles of UAE leaders to better understand real world leadership challenges. Utilise leadership communication tools to develop the leadership skills of both leading and following class mates, required for effective teamwork, both inside and outside the classroom. Explore strengths and weaknesses in leadership roles in practical situations both inside and outside the classroom and through self-reflection.
CREDITS: 3.00

LSM 1003 - Applied Mathematics

Solve business applications involving buying, selling and percentages. Compute and describe data using basic statistical techniques. Use linear models for business decision making. Apply linear regression and correlation analysis to problems with two business variables. Solve business problems involving simple interest and compound interest.
CREDITS: 3.00

LSM 1103 - Technical Mathematics

Demonstrate competence in algebraic manipulation by extending properties of numbers to symbols. Recognise characteristics of real numbers and apply these to solve real world problems. Solve equations algebraically and apply them to real -world problems. Explore geometric relationships, and apply techniques and formulas to solve real world problems. Recognise functional relationships and their graphs, and apply them to solve real-world problems and interpret solutions.
CREDITS: 3.00

LSM 1113 - Statistical Mathematics

Categorise, organise, summarise and present data in a meaningful way. Compute measures of central tendency and variability of data sets. Apply basic rules of probability to calculate the likelihood of random events. Construct the probability distribution of a discrete random variable and demonstrate its application to real life problems. Describe the characteristics of the normal distribution and demonstrate its application to real world problems. Perform regression analysis to make informed predictions about relationships between quantitative variables.
CREDITS: 3.00

LSM 1123 - Quantitative Reasoning

Apply the principles of inductive and deductive reasoning. Demonstrate proficiency in mathematical skills and conceptual understanding of the following topics: number theory, mathematical modeling, contemporary applications and geometry. Apply mathematical concepts to a variety of real world problems. Apply the concepts learned to the fields of music, design, photography and media in a project-based environment.
CREDITS: 3.00

LSN 1113 - Introduction to Sustainability

Define sustainability and sustainable development. Explain the environmental, social, and economic significance of natural resource extraction at a local, regional, national, and global level. Understand and explain the human impact on the planet using a variety of measures. Recognise the human impact on basic ecological systems. Relate the concept of social responsibility to local, regional, national, and global issues.
CREDITS: 3.00

LSN 2103 - Early Childhood Health and Wellness

Describe the mental and physical milestones of children from birth to the age of five years and when to seek appropriate medical care. Apply good nutrition principles to common dietary health issues and needs in children. Identify standards of health for infants and children in regard to vaccination schedules. Identify common childhood diseases or illnesses and their etiology, treatment and prevention. Predict possible environmental and home hazards for children, to promote a safe and healthy lifestyle, including exposure to technology. Communicate effectively to caregivers.
CREDITS: 3.00

LSN 2433 - Ecology
Recognise basic ecological concepts and describe a variety of interactions between organisms, natural selection and adaptation to the environment. Define species, population, community and ecosystem. Recognise the main marine and terrestrial ecosystems in the UAE and the Gulf Region and major land ecosystems in the world. Describe the carbon, hydrological and nutrient cycles and identify human influences on these cycles. Describe practical applications of ecological knowledge: nature conservation and waste management.
CREDITS: 3.00

LSS 1003 - Life and Study Skills
Recognise the importance of self-awareness and life skill development for successful college life. Understand the HCT policies, resources, structures and services. Apply a range of learning support systems, resources and software. Demonstrate an understanding of higher education research resources and strategies, including avoiding plagiarism by citing sources. Apply time management, critical thinking, team work and effective study skills to aid student success. Engage the community in 25 hours of community service work.
CREDITS: 3.00

LSS 1123 - Basic Methods of Scientific Research and Development
Provides knowledge and skills relevant to scientific research including the basic concepts and processes of research methodology, innovation and development. Enables the identification of research problems, the formulation of hypotheses and the clarification of assumptions. Explains the processes of: literature review; data collection, analysis and interpretation; and the writing of a research report. Examines both quantative and qualitative models of research and analysis. Fosters creative and innovative thinking and provides opportunities for their practical application.
CREDITS: 3.00

LSS 2113 - Intercultural Studies
Provides a platform for students to explore intercultural issues in a contemporary global society. Describes the key concepts and components of culture. Compares and contrasts different culture's analytical frameworks. Demonstrates an understanding of cultural diversity, multiculturalism, social change, and intercultural communication issues. Recognises how culture may result in conflict and applies different strategies to resolve it. Critically analyses cultural case studies by applying concepts and terms through research based projects.
CREDITS: 3.00

LSS 2533 - Research Methods
Introduces the techniques and methods of applied research. Write a research proposal and carry out primary research and relate it to secondary research. Produce a findings report overviewing the research conducted and interpreting the findings in written and oral format. Demonstrate knowledge of concepts by way of a journal article review and knowledge test.
CREDITS: 3.00

MAR 3003 - Transport and Maritime Law
Introduces the multimodal transportation and removal services. This includes international inland transportation and the details of the CMNI/Budapest convention. One balance point is the contract management in multimodal transports and the cooperation between the "Maritime Law" and the "Contract Law". Students learn and explain different case studies, for example cargo damage.
CREDITS: 3.00

MAR 4703 - Shipping Management
Introduces the technical and operational aspects of ship management. The operations that are necessary to transport cargo in a safe, efficient, and commercially viable manner are included. Nautical, commercial and cargo operations are examined in detail. The course also examines the concepts which underpin ship operations, including: asset maintenance; quality management; and risk management.
CREDITS: 3.00

MTH 1103 - Pre Calculus
Provides the student with background mathematical skills essential for progression to the study of calculus and further engineering mathematics. Topics include: polynomials; linear algebra; vectors; complex numbers; exponential and logarithmic functions; variation; and inequalities. Software applications such as MATLAB are used as tools to solve problems.
CREDITS: 3.00

MTH 1113 - Statistics for Engineering
Apply statistics to engineering problems. Calculate the measures of central tendency for populations and samples. Determine the probability of a set of numbers. Use relevant software to solve engineering problems.
CREDITS: 3.00

MTH 1203 - Calculus I
Apply the concepts of trigonometry and algebra to determine limits and establish continuity for an equation. Calculate the derivative of algebraic,

trigonometric, logarithmic and exponential functions. Apply the derivative to opimisation of problems. Determine the maxima and minima of a function. Create graphs to solve problems.
CREDITS: 3.00

MTH 2103 - Calculus II
Apply Integral Calculus and associated applications to solve engineering problems. Determine the sums, indefinite and definite integrals. Study integration techniques, parametric equations and polar coordinates, as well as the application of integration, and an introduction to numerical integration techniques.
CREDITS: 3.00

MTH 2503 - Linear Algebra and Differential Equations
Solve systems of linear equations, matrices, and first order differential equations; existence and uniqueness; second order differential equations; Laplace transform and its use in differential equations; and simple partial differential equations. The systems of linear equations and matrices, Gaussian elimination, matrix operation, inverse, linear transformation, Eigen values and Eigen vectors are applied to appropriate equations.
CREDITS: 3.00

MTH 3013 - Calculus III
Apply hyperbolic functions and their inverse to solve complex functions. Solve problems requiring Taylor, Maclauren and Fourier series, operations with vectors dot and cross products, lines and planes. Functions of several variables, partial derivatives, double and triple integrals, moments, center of mass, volumes, double integrals in polar forms, triple integrals in cylindrical and spherical coordinates, line integrals and Green's theorem are also covered.
CREDITS: 3.00

PHY 1103 - Physics I
An introductory level physics course that is essential for all engineering programmes. It covers many of the fundamental principles of physics such as units of measurement, linear motion, circular motion and angular motion, forces and Newton's laws of motion, work and energy, collisions and conservation laws, momentum and mechanical waves and oscillations. Laboratory work is required to reinforce and stress the importance of these principles using the experimental method for investigating and reporting results.
CREDITS: 3.00

PHY 1203 - Physics II
A second course of introductory level physics course that is key for several engineering programmes. It covers many of the fundamental principles of physics such as electric charge and electrostatics fields, Coulomb's law and electric potential, electric current and magnetic fields, Ampere's law and Faraday's law of induction, optics, sound and mechanical waves. Laboratory work, utilising experimental methodology and written reports, is used to reinforce these principles.
CREDITS: 3.00

Applied Communications

Business

Computer Information Science

Education

Engineering Technology and Science

Health Sciences

Foundations

General Studies

Arabic & Emirati Studies