



UNIVERSITY
OF WOLLONGONG
IN DUBAI

Faculty of Engineering
and Information Sciences

UNIVERSITY OF WOLLONGONG IN DUBAI

FACULTY OF ENGINEERING AND INFORMATION SCIENCES
UG DEGREE PLANNER
HANDOUT VERSION

A 3D graphic of a ribbon or banner, rendered in light blue and grey, with the text '2016-2017' centered on it.

2016-2017

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UNDERGRADUATE PROGRAMS

BACHELOR OF COMPUTER SCIENCE

Testamur Title of Degree:	Bachelor of Computer Science
Abbreviation:	BCompSc
Specialisations	Digital Systems Security Multimedia and Game Development
UOWD Course Code:	1766
Total Credit Points:	204
Duration:	4 years (8 sessions) full time
Home Faculty:	Faculty of Engineering and Information Sciences
Intake Session(s):	Autumn/Spring/Summer
Delivery Mode:	On Campus (Face-to-face)

Computer science is the study of algorithmic processes that describe and transform information: theory, analysis, programming and design. The Bachelor of Computer Science focuses on the development of high-level programming skills that can be applied across a wide range of applications, including analysis of stock market trends, games design, neural network design, automatic teller machines and patient monitoring in hospitals.

The core subjects help students understand the structure of data and the role it plays in delivering solutions to complex problems. The degree includes core of programming subjects as well as electives in languages, artificial intelligence, computer security, computer graphics, operating systems, real-time software and software engineering. This program provides students with a strong core of computing and allows them to pursue their interest by choosing among many specialised electives or to major in areas such as Digital Systems Security and in Multimedia and Game Development.

The Bachelor of Computer Science is accredited by the UAE Ministry of Education - Higher Education Affairs. It is also accredited by the Australian Computer Society as meeting requirements for membership at a "Professional Level".

Degree Requirements

To qualify for award of the degree of Bachelor of Computer Science, a candidate shall accrue an aggregate of at least 204 Credit Points (cp) which include 60cp of General Education, 96cp from the program core and the specific major requirements as specified in the table below. Students are also required to accrue an overall weighted average mark (WAM) of 50%.

Major	Requirements: Major Core	Requirements: Elective
Bachelor of Computer Science		48cp
Bachelor of Computer Science (Digital Systems Security)	30cp	18cp
Bachelor of Computer Science (Multimedia and Game Development)	30cp	18cp

Degree Structure

	Old Subject Code	Subject Code	Subject Title	Credit points	Pre-requisites
General Education (GED)	English, Arabic or other Languages (18cp)				
		GED 010	Academic Study Skills 1	12	
		GED 020	Academic Study Skills 2	6	GED 010
	Information Technology and Mathematics (18cp)				
		MATH015*	Foundation Mathematics A	6	
		STAT015*	Introduction to Statistics	6	
		MATH020	Foundation Mathematics B	6	MATH015
	Islamic Studies or History or Culture (6cp)				
		ARTS017	Islamic Culture	6	
	One subject from Natural or Physical Sciences (6cp)				
		ENVI030	Environmental Science	6	
		PHYS030	Foundation Physics	6	
	One subject from Humanities or Arts (6cp)				
		ARTS035	Introduction to Philosophy	6	
		LAW 101	Law, Business and Society	6	
	One subject from Social or Behavioural Sciences (6cp)				
	PSYC015	Introduction to Psychology	6		
	SOC 103	Introduction to Sociology	6		
Program Core Subjects		CSCI103	Algorithms and Problem Solving	6	
		CSCI114	Procedural Programming	6	
		CSCI124	Applied Programming	6	(CSCI114 and CSCI103) or (CSCI114 and MATH111)
		MATH121	Discrete Mathematics	6	
		CSCI131	Introduction to Computer Systems	6	CSCI124
		STAT131	Understanding Variation and Uncertainty	6	
		ISIT102	Information Systems	6	
		ISIT105	Communications and Networks	6	
		ISIT301	Professional Practice & Ethics	6	24cp @200 level
		CSCI235	Database Systems	6	CSCI124
		CSCI204	Object and Generic Programming in C++	6	CSCI124 or CSCI192
		CSCI212	Interacting Systems	6	CSCI124
		CSCI203	Algorithms and Data Structures	6	CSCI124
		CSCI222	Systems Development	6	CSCI204
	CSCI321	Project	12	(CSCI222+ CSCI204) AND 12cp of 200 level subjects CSCI222+ CSCI204) AND 12cp of 200 level subjects	
Below is the approved list of electives for the Bachelor of Computer Science					
Students need to choose 48cp of electives (8 subjects) if they are not opting for any major of study					
Electives		CSCI205	Software Development Methods & Tools	6	CSCI124 or CSCI192
		CSCI213	Java Programming and Applications	6	CSCI124 or CSCI192
		CSCI236	3D Modelling and Animation	6	12 credit points of 200 level CSCI subjects
		CSCI262	System Security	6	CSCI124
		CSCI311	Software Process Management	6	CSCI205

CSCI319	Distributed Systems and Cloud Computing	6	CSCI204 or CSCI251, CSCI203 and additional 12cp at 200 level (CSCI/CSIT/ISIT)
CSCI322	Systems Administration	6	(CSCI212 and 6cp of 200-level CSCI subjects) or (ISIT212 & ISIT114 & ISIT302)
CSCI323	Artificial Intelligence	6	CSCI204 and 6cp of 200-level CSCI subjects
CSCI224	Human Computer Interaction	6	
CSCI336	Computer Graphics	6	CSCI204 and 6cp of 200-level CSCI subjects
CSCI356	Game Engine Essentials	6	CSCI204 or CSCI251 and 12cp @200 level CSIT/CSCI
CSCI358	Security Engineering	6	12cp of 200 level CSCI subjects
CSCI361	Cryptography and Secure Applications	6	(CSCI204 or CSCI213) plus 6cp of 200-level CSCI subjects
CSCI366	Multimedia Computing	6	CSCI204
CSCI368	Network Security	6	CSCI361
CSCI370	Special Topics in Computer Science A	6	12 credit points of CSCI or IACT @ 200 level
CSCI399	Internet Applications	6	CSCI213 and CSCI110 or ISIT206 and CSCI213
CSCI350	Internship	6	
ISIT100	Systems Analysis	6	
ISIT201	Information and Communication Security	6	24cp @ 100 level ISIT, BUSS CSCI or ECTE
ISIT204	Principles of eBusiness	6	24cp @100 level any subjects
ISIT207	Web Programming I	6	ISIT114 or CSCI124
ACCY111	Accounting Fundamentals in Society	6	
ACCY112	Accounting in Organisations	6	ACCY111 or ACCY100
ECON101	Macroeconomic Essentials for Business	6	
ECON111	Introductory Microeconomics	6	
MARK101	Marketing Principles	6	
MARK301	Digital Marketing	6	MARK101
MARK343	International Marketing	6	MARK101
MGMT110	MGNT110	6	Introduction to Management
MGMT201	MGNT201	6	Organisational Behaviour
MGMT206	MGNT206	6	Managing Human Resources

* Challenge tests are available for STAT015 and MATH015.

The following provides the requirements for each of the specialisation within the Bachelor of Computer Science Program

BACHELOR OF COMPUTER SCIENCE (DIGITAL SYSTEMS SECURITY)

The Bachelor of Computer Science (Digital Systems Security) focuses on the theoretical and practical applications of information and digital security across a range of subjects: operating systems security such as physical security, file and data protection, distributed systems and systems architecture, cryptography and its secure applications, and network and telecommunications security. Information and cyber security is becoming increasingly important for everyday life in that there is a want for technology to protect our digital information such as IDs, assets and data security, and to secure email and online privacy for individuals, homes, families and offices. Skills derived from this major are in demand across all sectors: from banking to finance, insurance, retail, government and defence, all fields where there is sensitive data and information that is at risk of being hacked and breached via the internet.

Degree Structure

In addition to the GED and Program Core, students are required to complete the following major core subjects and electives

	Old Subject Code	Subject Code	Subject Title	Credit points	Pre-requisites
Specialisation Core Subjects		CSCI262	System Security	6	CSCI124
		CSCI319	Distributed Systems and Cloud Computing	6	CSCI204 or CSCI251, CSCI203 and additional 12cp at 200 level (CSCI/CSIT/ISIT)
		CSCI361	Cryptography and Secure Applications	6	(CSCI204 or CSCI213) plus 6cp of 200-level CSCI subjects
		CSCI368	Network Security	6	CSCI361
		CSCI358	Security Engineering	6	12cp of 200 level CSCI subjects
		Plus 3 electives from the list below			
Electives		CSCI205	Software Development Methods & Tools	6	CSCI124 or CSCI192
		CSCI213	Java Programming and Applications	6	CSCI124 or CSCI192
		CSCI236	3D Modelling and Animation	6	12 credit points of 200 level CSCI subjects
		CSCI262	System Security	6	CSCI124
		CSCI311	Software Process Management	6	CSCI205
		CSCI322	Systems Administration	6	(CSCI212 and 6cp of 200-level CSCI subjects) or (ISIT212 & ISIT114 & ISIT302)
		CSCI323	Artificial Intelligence	6	CSCI204 and 6cp of 200-level CSCI subjects
		CSCI224	Human Computer Interaction	6	
		CSCI336	Computer Graphics	6	CSCI204 and 6cp of 200-level CSCI subjects
		CSCI356	Game Engine Essentials	6	CSCI204 or CSCI251 and 12cp @200 level CSIT/CSCI
		CSCI366	Multimedia Computing	6	12cp of 200 level CSCI subjects
		CSCI370	Special Topics in Computer Science A	6	12 credit points of CSCI or IACT @ 200 level
		CSCI399	Internet Applications	6	CSCI213 and CSCI110 or ISIT206 and CSCI213

	CSCI350	Internship	6	
	ISIT100	System Analysis	6	
	ISIT201	Information and Communication Security	6	24cp @ 100 level ISIT, BUSS CSCI or ECTE
	ISIT204	Principles of eBusiness	6	24cp @ 100 level any subjects
	ISIT207	Web Programming I	6	ISIT114 or CSCI124
	ACCY111	Accounting Fundamentals in Society	6	
	ACCY112	Accounting in Organisations	6	ACCY111 or ACCY100
	ECON101	Macroeconomic Essentials for Business	6	
	ECON111	Introductory Microeconomics	6	
	MARK101	Marketing Principles	6	
	MARK301	Digital Marketing	6	MARK101
	MARK343	International Marketing	6	MARK101
MGMT110	MGNT110	Introduction to Management	6	
MGMT201	MGNT201	Organisational Behaviour	6	MGNT110/MGMT110
MGMT206	MGNT206	Managing Human Resources	6	MGNT110/MGMT110

BACHELOR OF COMPUTER SCIENCE (MULTIMEDIA AND GAME DEVELOPMENT)

The Bachelor of Computer Science (Multimedia and Game Development) provides students with both the traditional computer skills as well as creative skills, including visualisation, interaction and communication techniques. Subjects include 3D modelling and animation, computer graphics, game engine essentials, multicore and GPU programming, and multimedia computing. Graduates from this program would be able to develop interactive computer games as well as work in the broader fields of multimedia and digital media. Areas of employment include games design, games programming, software design and development, multimedia applications development and web systems development.

Degree Structure

In addition to the GED and Program Core, students are required to complete the following major core subjects and electives

	Old Subject Code	Subject Code	Subject Title	Credit points	Pre-requisites
Specialisation Core Subjects		CSCI236	3D Modelling and Animation	6	12 credit points of 200 level CSCI subjects
			Plus 4 subjects (24cp) from the list below		
		CSCI346	Game Development	6	CSCI236
		CSCI356	Game Engine Essentials	6	CSCI204 or CSCI251 and 12cp @200 level CSIT/CSCI
		CSCI336	Computer Graphics	6	CSCI204 and 6cp of 200-level CSCI subjects
		CSCI366	Multimedia Computing	6	CSCI204
		CSCI224	Human Computer Interaction	6	
			Plus 2 electives from the list below		
Electives		CSCI205	Software Development Methods & Tools	6	CSCI124 or CSCI192
		CSCI213	Java Programming and Applications	6	CSCI124 or CSCI192
		CSCI262	System Security	6	CSCI124
		CSCI311	Software Process Management	6	CSCI205
		CSCI319	Distributed Systems and Cloud Computing	6	CSCI204 or CSCI251, CSCI203 and additional 12cp at 200 level (CSCI/CSIT/ISIT)
		CSCI322	Systems Administration	6	(CSCI212 and 6cp of 200-level CSCI subjects) or (ISIT212 & ISIT114 & ISIT302)
		CSCI323	Artificial Intelligence	6	CSCI204 and 6cp of 200-level CSCI subjects
		CSCI358	Security Engineering	6	12cp of 200-level CSCI subjects (CSCI204 or CSCI213) plus 6cp of 200-level CSCI subjects
		CSCI361	Cryptography and Secure Applications	6	CSCI361
		CSCI368	Network Security	6	CSCI361
		CSCI370	Special Topics in Computer Science A	6	12 credit points of CSCI or IACT @ 200 level
		CSCI399	Internet Applications	6	CSCI213 and CSCI110 or ISIT206 and CSCI213
		CSCI350	Internship	6	
		ISIT100	Systems Analysis	6	
		ISIT201	Information and Communication Security	6	24cp @ 100 level ISIT, BUSS CSCI or ECTE

	ISIT204	Principles of eBusiness	6	24cp @100 level any subjects
	ISIT207	Web Programming I	6	ISIT114 or CSCI124
	ACCY111	Accounting Fundamentals in Society	6	
	ACCY112	Accounting in Organisations	6	ACCY111 or ACCY100
	ECON101	Macroeconomic Essentials for Business	6	
	ECON111	Introductory Microeconomics	6	
	MARK101	Marketing Principles	6	
	MARK301	Digital Marketing	6	MARK101
	MARK343	International Marketing	6	MARK101
MGMT110	MGNT110	Introduction to Management	6	
MGMT201	MGNT201	Organisational Behaviour	6	MGNT110/MGMT110
MGMT206	MGNT206	Managing Human Resources	6	MGNT110/MGMT110

BACHELOR OF INFORMATION TECHNOLOGY (MANAGEMENT INFORMATION SYSTEMS)

Testamur Title of Degree:	Bachelor of Information Technology
Abbreviation:	BIT (MIS)
Specialisations	Management Information Systems
UOWD Course Code:	1848
Total Credit Points:	204
Duration:	Full time
Home Faculty:	Faculty of Engineering and Information Sciences
Intake Session(s):	Autumn/Spring/Summer
Delivery Mode:	On Campus (Face-to-face)

The Bachelor of Information Technology (Management Information Systems) provides students with the knowledge and skills to apply appropriate technologies to achieve commercial advantage. The program teaches the methodologies and tools to harness information technology, from both strategic and operational perspectives, to create business efficiencies. It helps enhance analytical, problem solving, decision-making and critical thinking skills and helps to develop an understanding of key business concepts. The program offers graduates key skills required for any IT professional such as: organisational areas in IT, database management, programming, information systems analysis and design, communications and networks, security, eBusiness, project management, web-based technology, and professional practice in IT. Graduates of this program will be able to manage specifications, design and implement systems and select and apply appropriate technologies for the automation of business information.

Degree Requirements

To qualify for award of the degree of Bachelor of Information Technology (Management Information Systems), a candidate shall accrue an aggregate of at least 204 Credit Points (cp) which include 60cp of General Education, 132cp from the program core and 12cp electives. Students are also required to accrue an overall weighted average mark (WAM) of 50%.

Degree Structure

	Old Subject Code	Subject Code	Subject Title	Credit points	Pre-requisites
General Education (GED)	English, Arabic or other Languages (18cp)				
		GED 010	Academic Study Skills 1	12	
		MGMT102	MGNT102 Business Communications	6	
	Information Technology and Mathematics (18cp)				
		MATH015*	Foundation Mathematics A	6	
		STAT015*	Introduction to Statistics	6	
		MATH020	Foundation Mathematics B	6	MATH015
	Islamic Studies or History or Culture (6cp)				
		ARTS017	Islamic Culture	6	
	One subject from Natural or Physical Sciences (6cp)				
		ENVI030	Environmental Sciences	6	
		PHYS030	Foundation Physics	6	
	One subject from Humanities or Arts (6cp)				
		ARTS035	Introduction to Philosophy	6	

	LAW 101	Law, Business and Society	6		
	One subject from Social or Behavioural Sciences (6cp)				
	PSYC015	Introduction to Psychology	6		
	SOC 103	Introduction to Sociology	6		
Program Core Subjects	ISIT100	Systems Analysis	6		
	ISIT102	Information Systems	6		
	ISIT105	Communications and Networks	6		
	ISIT111	Programming Concepts	6		
	ISIT112	Database	6		
	ISIT114	Object Oriented Programming	6	BUSS111 or CSCI114 or ISIT111	
	ISIT201	Information and Communication Security	6	24cp @100 level ISIT, BUSS, CSCI, ECTE	
	ISIT208	Strategic Systems Management	6	24cp @100 level any subjects	
	ISIT218	Systems Design and Human Computer Interaction	6	ISIT100 or BUSS211	
	ISIT301	Professional Practice & Ethics	6	24cp @200 level	
	ISIT311	Database Management Systems	6	ISIT112 plus 6cp of ISIT @200-level OR BUSS212	
	ISIT318	Information Systems Project	12	ISIT206 and ISIT218	
	STAT131	Understanding Variation and Uncertainty	6		
	ACCY111	Accounting Fundamentals in Society	6		
	ACCY112	Accounting in Organisations	6	ACCY111 or ACCY100	
	ECON111	Introductory Microeconomics	6		
	FIN 111	Introductory Business Finance	6		
	MARK101	Marketing Principles	6		
	MGMT110	MGNT110	Introduction to Management	6	
	MGMT206	MGNT206	Managing Human Resources	6	MGNT110/MGMT110
MGMT314	MGNT314	Strategic Management	6	MGNT110/MGMT110 plus MARK213 or MARK101 plus 72 credit points	
	Plus 2 electives from the list below				
Electives	MARK301	Digital Marketing	6	MARK101	
	ISIT204	Principles of eBusiness		24cp @100 level any subjects	
	MGMT309	OPS 309	Supply Chain Strategies	6	MGMT110/MGNT110 plus MGMT257/OPS 257 plus ECON121 or COMM121 or STAT131
	MGMT311	MGNT311	Management of Change	6	MGNT110/MGMT110
	MGMT316	OPS 216	Operations Management	6	ECON121 or COMM121 or STAT131

BACHELOR OF ENGINEERING

Testamur Title of Degree:	Bachelor of Engineering
Abbreviation:	B.E
Specialisations	Computer Engineering Electrical Engineering Telecommunication Engineering
UOWD Course Code:	360
Total Credit Points:	220
Duration:	Full time
Home Faculty:	Faculty of Engineering and Information Sciences
Intake Session(s):	Autumn/Spring/Summer
Delivery Mode:	On Campus (Face-to-face)

The Bachelor of Engineering program with major in Computer Engineering, Electrical Engineering or Telecommunications Engineering trains engineers for exciting and successful careers as system designers and developers, engineering managers, analysts, educators and researchers. This program prepares graduates to be globally recognised professional engineers with the requisite knowledge, skills and attributes to further develop in their chosen careers. They will have the capacity to effectively lead and contribute to the advancement of engineering, technology and commerce. This program is designed to provide the basic theoretical background required by professional engineers as well as experience in working in teams and the ability to manage the process of designing and developing engineering solutions to address real world problems.

Degree Requirements

To qualify for award of the degree of Bachelor of Engineering in either of the specialisations, a candidate shall accrue an aggregate of at least 220 Credit Points (cp) which include 30cp of General Education, 160cp from the program core and 30cp major requirements. Students are also required to accrue an overall weighted average mark (WAM) of 50%.

All Bachelor of Engineering students are required to take the Engineering Placement Tests in their first semester of study.

Degree Structure

	Subject Code	Subject Title	Credit points	Pre-requisites
General Education (GED)	English, Arabic or other Languages (12cp)			
	GED 010	Academic Study Skills 1	12	
	Islamic Studies or History or Culture (6cp)			
	ARTS017	Islamic Culture	6	
	One subject from Humanities or Arts (6cp)			
	ARTS035	Introduction to Philosophy	6	
	LAW 101	Law, Business and Society	6	
	ISIT301	Professional Practice & Ethics		
	One subject from Social or Behavioural Sciences (6cp)			
	PSYC015	Introduction to Psychology	6	

	SOC 103	Introduction to Sociology	6	
Program Core	MATH141	Foundations of Engineering Mathematics	6	
	MATH142	Essentials of Engineering Mathematics	6	MATH141
	ENGG100	Engineering Computing and Analysis	6	
	ENGG102	Fundamentals of Engineering Mechanics	6	
	ENGG103	Materials in Design	6	
	ENGG104	Electrical Systems	6	
	ENGG105	Engineering Design for Sustainability	6	
	PHYS143	Physics for Engineers	6	
	CSCI291	Programming for Engineers	6	ENGG100
	MATH291	Differential Equations	3	MATH142
	ECTE233	Digital Hardware	6	ENGG100 OR ENGG104
	ECTE202	Circuits and Systems	6	ENGG104 and MATH142
	ECTE203	Signals and Systems	6	MATH142
	MATH253	Linear Algebra	4	MATH142
	ECTE213	Engineering Electromagnetics	6	MATH142 and PHYS143
	ECTE212	Electronics	6	ENGG104
	ECTE324	Foundations in Electrical Energy Utilisation	6	MATH291 and STAT291
	ECTE333	Microcontroller Architecture and Applications	6	ECTE233 and ENGG100
	ECTE301	Digital Signal Processing	6	ECTE203
	ECTE364	Data Communications	6	CSCI291 or CSCI191
	STAT291	Engineering Statistics	3	MATH142
	ECTE250	Engineering Design and Management 2	6	ECTE233 and (ENGG100 Or CSCI191)
	ECTE350	Engineering Design and Management 3	6	ENGG104, ECTE250, (CSCI291 or CSCI191) and ECTE233
ECTE344	Control Theory	6	ECTE 203	
ECTE363	Communication Systems	6	ECTE203 and MATH253	
ECTE399	Professional Experience	0		
ECTE451	Engineering Project 1	6	Successful completion of all 36 credit points of 300 level subjects required for the award of either the Bachelor of Engineering (Electrical, Computer, Telecommunications) degree	
ECTE458*	Engineering Project 2	12	ECTE451 with a result of Credit or better	

Electrical Engineering Specialisation Core (30cp)	Subject Code	Subject Title	Credit points	Pre-requisites
	ECTE323	Power Engineering 2	6	(ECTE222 or ECTE324) and MATH291 and STAT291
	Plus at least 3 subjects from the list below			
	ECTE423	Power System Analysis	6	ECTE323, MATH291 and STAT291
	ECTE433	Embedded Systems	6	ECTE333
	ECTE465	Wireless Communication Systems	6	MATH291 and STAT291
	ECTE412	Power Electronics and Drives	6	ECTE222 or ECTE324, and MATH253 and STAT291
	ECTE426	Power Distribution Systems	6	ECTE222 or ECTE324, MATH253 and STAT291
	ECTE471	Robotics and Flexible Automation	6	MATH291 and STAT291
Plus one subject from the table titled List of Specialisation Subjects				

Computer Engineering Specialisation Core Subjects (30cp)	Subject Code	Subject Title	Credit points	Pre-requisites
	ECTE331	Real-time Embedded Systems	6	ECTE233 and (CSCI291 or CSCI191 or CSCI114)
	ECTE432	Computer Architecture	6	ECTE233
	Plus at least 2 subjects from the list below			
	ECTE401	Multimedia Signal Processing	6	ECTE301
	ECTE433	Embedded Systems	6	ECTE333
	ECTE471	Robotics and Flexible Automation	6	MATH291 and STAT291
CSCI318	Software Engineering Practices & Principles	6	ECTE250, ENGG100 and CSCI291	
Plus one subject from the table titled List of Specialisation Subjects				

Telecommunication Engineering Specialisation Core Subjects (30cp)	Subject Code	Subject Title	Credit points	Pre-requisites
	ECTE469	Queuing Theory and Optimization	6	MATH291 and STAT291
	ECTE331	Real-time Embedded Systems	6	ECTE233 and (CSCI291 or CSCI191 or CSCI114)
	Plus at least 2 subjects from the list below			
	ECTE401	Multimedia Signal Processing	6	ECTE301
	ECTE465	Wireless Communication Systems	6	MATH291 and STAT291
	ECTE482	Network Engineering	6	ECTE364
Plus one subject from the table titled List of Specialisation Subjects				

List of Specialisation Subjects	Subject Code	Subject Title	Credit points	Pre-requisites
	ECTE427	Renewable and Embedded Generation	6	ECTE222 or ECTE324
	ECTE423	Power System Analysis	6	ECTE323, MATH291 and STAT291
	ECTE471	Robotics and Flexible Automation	6	MATH291 and STAT291
	ECTE465	Wireless Communication Systems	6	MATH291 and STAT291
	ECTE432	Computer Architecture	6	ECTE233
	ECTE401	Multimedia Signal Processing	6	ECTE301
	ECTE482	Network Engineering	6	ECTE364
	ECTE469	Queuing Theory and Optimization	6	MATH283 or STAT231
	ECTE412	Power Electronics and Drives	6	ECTE222, ECTE324, MATH253 and STAT291
	ECTE426	Power Distribution Systems	6	ECTE222, ECTE324, MATH253 and STAT291
	ECTE433	Embedded Systems	6	ECTE333

* Instead of completing ECTE458 (12cp), students may complete two subjects from the approved list of electives.

** All B.E. students need to take the Engineering Placement Tests on their first semester of study at the University. The Placement tests are conducted to assess the student's capabilities in Mathematics, Statistics and Physics to continue in the Engineering Program. Based on the results in the placement tests; students who need more fundamental understanding in these areas are advised to enrol for MATH020 and PHYS030 - Foundation Level courses which do not account for any credits towards the B.E Program but would help them strengthen their fundamentals to continue in the program.

SUBJECT OFFERING

The following are the Semester-wise Subject Offerings for each Faculty. Please note that the offerings are subject to change. Kindly contact the respective Faculty for the updated Subject Offerings.

UNDERGRADUATES

Subject Code	Subject Title	Autumn 2016	Spring 2017	Summer 2017	Autumn 2017
ACCY111	Accounting Fundamentals in Society	✓	✓	✓	✓
ACCY112	Accounting in Organizations	✓	✓	✓	✓
ACCY200	Financial Accounting II A	✓		✓	✓
ACCY201	Financial Accounting II B		✓		
ACCY211	Management Accounting II	✓			✓
ACCY231	Information systems in Accounting		✓		
ACCY305	Financial Accounting III		✓		
ACCY312	Management Accounting III	✓			✓
ACCY328	International Taxation		✓		
ACCY342	Auditing & Assurance Services	✓			✓
ARTS017	Islamic Culture	✓	✓	✓	✓
ARTS035	Introduction to Philosophy	✓	✓	✓	✓
COMM101	Principles of Responsible Commerce	✓	✓	✓	✓
COMM113	Introduction to Business Information Systems	✓	✓	✓	✓
COMM121	Quantitative Methods 1	✓	✓	✓	✓
COMM334	Intercultural Applications for Socially Innovative Business	✓	✓		✓
CSCI015	Computer Applications	✓			✓
CSCI103	Algorithms and problem solving	✓	✓		✓
CSCI114	Procedural programming	✓	✓		✓
CSCI124	Applied Programming	✓	✓		✓
CSCI131	Intro. Comp. Systems	✓			✓
CSCI192	Engineering Programming 2	✓			
CSCI203	Algorithms and data structures		✓		
CSCI204	O. Prog. & frameworks	✓			✓
CSCI212	Interacting systems	✓			✓
CSCI213	Java programming and object oriented design		✓		
CSCI222	Systems Development		✓		
CSCI224	Human computer interaction	✓			✓
CSCI235	Databases	✓			✓
CSCI236	3D Modelling and Animation	✓			✓
CSCI262	System Security	✓			✓
CSCI291	Programming for Engineers	✓			✓
CSCI311	Software process management	✓			✓
CSCI319	Distributed Systems		✓		
CSCI321	Project	✓	✓		✓
CSCI323	Artificial Intelligence			✓	
CSCI336	Graphics		✓		
CSCI342	Mobile Applications		✓		
CSCI346	Game Development	✓			✓
CSCI350	Internship (<i>only for BCS students</i>)			✓	
CSCI356	Game Engine fundamentals		✓		
CSCI358	Security Engineering		✓		

Subject Code	Subject Title	Autumn 2016	Spring 2017	Summer 2017	Autumn 2017
CSCI361	Cryptography and Secure Applications		✓		
CSCI368	Networks Security	✓			✓
ECON101	Macroeconomic Essentials for Business	✓	✓	✓	✓
ECON111	Introductory Microeconomics	✓	✓	✓	✓
ECON216	International Trade Theory & Policy	✓	✓		
ECON240	Financial Modelling	✓			✓
ECON332	Managerial Economics & Operations Research		✓		
ECTE202	Circuits and systems	✓			✓
ECTE203	Signals and systems		✓		
ECTE212	Electronics		✓		
ECTE213	Electromagnetism		✓		
ECTE233	Digital hardware 1	✓			✓
ECTE250	Engineering design and management 2		✓		✓
ECTE301	Digital Signal Processing	✓			✓
ECTE323	Power Engineering 2		✓		
ECTE331	Real-time Embedded Systems		✓		
ECTE333	Microcontroller Architecture and Applications	✓			✓
ECTE344	Control Theory		✓		
ECTE350	Engineering Design and Management 3	✓	✓		✓
ECTE363	Communication systems		✓		
ECTE364	Data Communications	✓			✓
ECTE399	Professional Experience (<i>only for BE students</i>)			✓	
ECTE401	Multimedia Signal Processing	✓			✓
ECTE412	Power Electronics	✓			✓
ECTE423	Power System Analysis	✓			✓
ECTE426	Power Distribution Systems		✓		
ECTE432	Computer Architecture		✓		
ECTE433	Embedded Systems	✓			✓
ECTE451	Engineering Project 1	✓	✓		✓
ECTE458	Engineering Project 2	✓	✓		✓
ECTE465	Wireless Communication Systems		✓		
ECTE469	Queuing Theory and Optimization		✓		
ECTE471	Robotics and Flexible Automation		✓		
ECTE482	Network Engineering	✓			
ENG 011	English 1				✓
ENGG100	Engineering computing and Analysis	✓		✓	✓
ENGG102	Fundamentals and engineering mechanics	✓	✓		✓
ENGG103	Materials in Design	✓		✓	✓
ENGG104	Electrical Systems		✓		
ENGG105	Engineering Design for Sustainability		✓		
ENVI030	Environmental studies	✓	✓	✓	✓
FIN 111	Introductory Principles of Finance	✓	✓	✓	✓
FIN 222	Corporate Finance	✓	✓		✓
FIN 223	Investment Analysis		✓	✓	
FIN 226	Financial Markets & Institutions		✓	✓	
FIN 241	International Financial Management	✓			✓
FIN 322	Advanced Corporate Finance		✓		
FIN 323	Portfolio Analysis		✓		
FIN 324	Financial Statement Analysis	✓			✓
FIN 351	International Finance	✓			✓
FIN 353	Global Electronic Commerce		✓		
GED 010	Academic Study Skills 1	✓	✓	✓	

Subject Code	Subject Title	Autumn 2016	Spring 2017	Summer 2017	Autumn 2017
GED 020	Academic Study Skills 2	✓	✓	✓	
ISIT100	Req. Deter. & System Analysis	✓			✓
ISIT102	Systems	✓		✓	✓
ISIT105	Communications and Networks		✓		
ISIT111	Business Programming 1		✓		
ISIT112	Database	✓			✓
ISIT114	Business Programming 2	✓			✓
ISIT201	IT Security		✓		
ISIT204	eBusiness Fundamentals		✓		
ISIT208	Computer Systems Management	✓			✓
ISIT218	System Design and Human Computer Interaction		✓		
ISIT301	Professional Practice and Ethics	✓		✓	✓
ISIT311	Database Management Systems		✓		
ISIT318	Project	✓			✓
LAW 101	Law, Business & Society	✓	✓	✓	✓
MARK101	Marketing Principles	✓	✓	✓	✓
MARK205	Introductory Marketing Research	✓			✓
MARK217	Consumer Behaviour		✓	✓	
MARK270	Services Marketing	✓			✓
MARK301	Internet Applications for Marketing	✓			✓
MARK333	Marketing Communications & Advertising		✓		
MARK343	International Marketing	✓		✓	✓
MARK344	Marketing Strategy		✓		
MARK395	Tourism Marketing		✓		
MATH015	Foundation Mathematics A	✓	✓	✓	✓
MATH020	Foundation Mathematics B	✓	✓	✓	✓
MATH121	Discrete Mathematics	✓			✓
MATH141	Foundations of Engineering Mathematics	✓	✓		✓
MATH142	Essentials of Engineering Mathematics		✓	✓	
MATH253	Linear algebra		✓		
MATH291	Diff. equations	✓			✓
MGNT102/ MGMT102	Business Communications	✓	✓	✓	✓
MGNT110/ MGMT110	Introduction to Management	✓	✓		✓
MGNT201/ MGMT201	Organizational Behaviour		✓		
MGNT205/ MGMT205	Recruitment & Selection	✓			✓
MGNT206/ MGMT206	Managing Human Resources		✓		
MGNT210/ MGMT301	Managing Across Cultures		✓		
MGNT215/ MGMT215	Small Business Management	✓			✓
MGNT218/ MGMT218	Competitive Analysis	✓			✓
MGNT220/ MGMT220	Organizational Analysis		✓		
MGNT311/ MGMT311	Management of Change	✓			✓
MGNT314/ MGMT314	Strategic Management	✓	✓		✓
MGNT321/ MGMT321	Occupational Health & Safety Management	✓			✓
MGNT322/ MGMT322	Training and Development	✓			✓
MGNT341/ MGMT341	International & Comparative HR Management		✓		
MGNT351/ MGMT351	Responsible Leadership	✓			✓
MGNT389/ MGMT389	International Bus. Management	✓			✓
OPS 216/ MGMT316	Operations Management	✓	✓		✓
OPS 350/ MGMT350	Continuous Quality Improvement		✓		
PHYS030	Foundation Physics	✓	✓	✓	✓
PHYS143	Physics for Engineers		✓		
PSYC015	Introduction to Psychology	✓	✓	✓	✓

Subject Code	Subject Title	Autumn 2016	Spring 2017	Summer 2017	Autumn 2017
SOC 103	Introduction to Sociology	✓	✓	✓	✓
STAT015	Introduction to statistics	✓	✓	✓	✓
STAT131	Understanding Variation and Uncertainty	✓		✓	✓
STAT291	Engineering Statistics	✓			✓

ACADEMIC CALENDAR

AUTUMN 2016 - 2017	
24 July (6.00pm)	Pre-enrolment Period (new & re-enrolling students)
14 September	Undergraduate Orientation and Enrolment
15 September	Postgraduate
15 September	<i>^Tuition Fees Due; 100% Refund</i>
18 September – 29 October	Lectures commence (6 weeks)
1 October	Last day to enrol in subjects <i>^Transfer of Fees 100%. Refunds – less 25% tuition fees</i>
9 October	<i>^Last Day for Transfer of Fees 100%. Refunds – less 50% tuition fees</i>
30 October - 5 November	Mid-Session break
6 November – 24 December	Lectures recommence (7 weeks)
26 November	Last day to withdraw without Academic Penalty (<i>No fee refund/ transfer</i>)
25 December - 6 January	Study Break
7 January - 16 January	Examinations
31 January	Results Released
5 February	Supplementary Exams Commence
SPRING 2017	
18 December (5.00pm)	Pre-enrolment Period (new & re-enrolling students)
1 February	Undergraduate Orientation and Enrolment
2 February	Postgraduate
2 February	<i>^Tuition Fees Due; 100% Refund</i>
5 February – 25 March	Lectures commence (7 weeks)
18 February	Last day to enrol in subjects <i>^Transfer of Fees 100%. Refunds – less 25% tuition fees</i>
25 February	<i>^Last Day for Transfer of Fees 100%. Refunds – less 50% tuition fees</i>
26 March – 8 April	Mid-Session break (2 weeks)
22 April	Last day to withdraw without Academic Penalty (<i>No fee refund/ transfer</i>)
9 April – 20 May	Lectures recommence (6 weeks)
21 May – 23 May	Study Break
24 May – 3 June	Examinations
15 June	Results Released
20 June	Supplementary Exams Commence

SUMMER 2017	
30 April (6.00pm)	Pre-enrolment Period
14 June	Orientation and Enrolment <i>for Undergraduate and Postgraduate</i>
15 June	[^] <i>Tuition Fees Due; 100% Refund</i>
18 June – 29 July	Lectures commence (6 weeks)
24 June	Last day to enrol in subjects [^]<i>Transfer of Fees 100%. Refunds – less 25% tuition fees</i>
1 July	[^] <i>Last Day for Transfer of Fees 100%. Refunds – less 50% tuition fees</i>
15 July	Last day to withdraw without Academic Penalty (<i>No fee refund/ transfer</i>)
30 July – 1 August	Study Break
2 August – 8 August	Examinations
17 August	Results Released
9 September	Supplementary Exams Commence
[^]Students MUST withdraw from their subjects/s via SOLS prior to submitting their Fee Refund/Transfer form	
<u>PUBLIC HOLIDAYS:</u> Students will be advised of make-up dates for classes falling on public holidays.	
* 11-12-13 September Eid-al-Adha (Feast of the Sacrifice)	* 25 December – Christmas Day
* 2 October - Al-Hijra (Islamic New Year)	* 1 January– New Year’s Day
* 30 November – Commemoration Day	* 24 April Leilat al-Meiraj (Ascension of the Prophet)
* 2 December – National Day	* 26-27 June Eid-al-Fitr (End of Ramadan)
* 12 December Mouloud (Birth of the Prophet)	
<i>Please note: Holidays will be confirmed once official Government announcements are made.</i>	