

# Undergraduate Programs 2016\_2017

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## College of Business and Economics

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### Department of Accounting

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#### Bachelor of Accounting

The department offers one Bachelor's degree in Accounting. The program is designed to provide comprehensive accounting education for students interested in learning about preparation of businesses financial statements and how these are audited; use of accounting information for managerial decisions; use of advanced management accounting techniques for strategy implementation and performance management; and advanced accounting issues. The Accounting program is AACSB-Accounting Accredited, being the first in the GCC and MENA region and the 10th worldwide outside North America. The degree is also accredited by the ACCA which is one of the largest international professional accounting organizations that qualify professional accountants. This accreditation means our graduates are exempted from up to 50% of the examination papers that one has to take to become an ACCA certified accountant. Also, the Accounting program graduates can follow the postgraduate path through the Department's AACSB-Accounting Accredited Master of Professional Accounting (MPA).

#### Program Objectives

- Effective communication skills.
- Critical thinking skills to the analysis and solution of Accounting problems.
- Positive contribution to teams, as members and leaders.
- Ethical and social awareness at the local and global level.
- In-depth knowledge in the field of accounting.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Communicate effectively orally, using technologies to support the oral presentation of information where appropriate.
- Communicate effectively in writing, select and use information technology where appropriate.
- Apply appropriate technologies and techniques to the collection and analysis of information and derive appropriate conclusions for accounting problems.

- Research, critically evaluate and interpret accounting information to accurately identify business problems and suggest solutions.
- Demonstrate autonomy and responsibility in their work.
- Apply teamwork skill and creativity in leadership and direction, appropriate to the context and level at which they are operating.
- Demonstrate ethical reasoning in relation to accounting issues.
- Develop an awareness of the civic responsibilities of the accounting discipline.
- Demonstrate a comprehensive knowledge of key concepts across the breadth of accounting topics.
- Utilize appropriate frameworks and theories from accounting to research and assess contemporary issues in the field and relate to allied (professional) fields where appropriate.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**

**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHIL120	Principles of Professional Ethics	3.00

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU104	Introduction to Academic English For Business	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
ECON105	Principles of Microeconomics <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH115	Calculus for Business & Economics <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS101	Conceptual Physics	3.00
PHYS100	Astronomy	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
MGMT415	Strategic Management <sup>4</sup>	3.00
4 : Also counts towards the Major		

## College of Business

<b>Required Courses (45.00 hours)</b>		<b>Credit Hours</b>
ACCT100	Principles of Financial Accounting	3.00
ACCT225	Fundamental of Cost & Management Accounting	3.00
ECON125	Principles of Macroeconomics	3.00
ESPU240	Business Writing in English	3.00
FINC240	Principles of Financial Management	3.00
GBUS460	Internship	12.00
MGMT200	Fundamentals of Management	3.00
MIST200	Foundation of MIS & Technologies	3.00
MKTG200	Principles of Marketing	3.00
PRVT2652	Business Law (E)	3.00
SCML200	Supply Chain Management & Operations	3.00
STAT130	Statistics for Business	3.00

## Accounting

<b>Major Requirements (21.00 hours)</b>		<b>Credit Hours</b>
ACCT311	Islamic Accounting	3.00
ACCT235	Intermediate Accounting I	3.00
ACCT245	Intermediate Accounting II	3.00

ACCT315	Principles of Auditing	3.00
ACCT351	Cost and Managerial Accounting	3.00
ACCT422	Accounting Information Systems	3.00
ACCT455	Comprehensive Accounting Seminar	3.00

<b>Financial Accounting Stream (Must take at least 2 from the following group + 1 from this group or the other two groups) (9.00 hours)</b>	<b>Credit Hours</b>
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ACCT324	International Accounting	3.00
ACCT413	Advanced Auditing	3.00
ACCT451	Advanced Accounting	3.00

<b>Managerial Accounting Stream (Must take at least 2 from the following group + 1 from this group or the other two groups) (9.00 hours)</b>	<b>Credit Hours</b>
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ACCT353	Internal Auditing	3.00
ACCT423	Advanced Accounting Information Systems	3.00
ACCT452	Advanced Managerial Accounting	3.00

<b>General Stream (May choose from any three courses of the nine stream courses) (9.00 hours)</b>	<b>Credit Hours</b>
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ACCT334	Governmental Accounting	3.00
ACCT352	Oil and Gas Accounting	3.00
ACCT453	Accounting Theory	3.00

<b>Free Electives (6.00 hours)</b>	<b>Credit Hours</b>
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# Department of Business Administration

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## Bachelor of Business Administration

The Bachelor of Business Administration degree enables students to pursue a broad range of careers in business and government sectors with four specialty tracks: Entrepreneurship, Human Resources Management, Marketing, and Supply Chain Management. Driven by students' need to compete in a global job market, the Business Administration program is internationally accredited providing students with worldwide recognition of their prestigious academic degrees. The program is designed to help meet the growing and changing labor market needs of the UAE economy. The Business Administration curriculum equips students with core business skills including finance, accounting, and economics, and knowledge in all business functions. Students obtain a solid foundation in managerial and analytical skills in theory and in real-world business practice with an internship program. The program prepares students not only for careers in government and industry but also for graduate studies.

### Program Objectives

- Effective communication skills.
- Critical thinking skills to the analysis and solution of business problems.
- Positive contribution to teams, as members and leaders.
- Ethical and social awareness at the local and global level.
- In-depth knowledge in the specialist field of business.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Communicate effectively orally, using technologies to support the oral presentation of information where appropriate.
- Communicate effectively in writing, select and use information technology where appropriate.
- Apply appropriate technologies and techniques to the collection and analysis of information and derive appropriate conclusions for business problems.
- Research, critically evaluate and interpret information to accurately identify business problems and suggest solutions.
- Demonstrate autonomy and responsibility in their work.
- Apply teamwork skills and creativity in leadership and direction, appropriate to the context and level at which they are operating.
- Demonstrate ethical reasoning in relation to business issues.
- Develop an awareness of the civic responsibilities of business.
- Demonstrate a comprehensive knowledge of key concepts across the breadth of business administration topics.
- Utilise appropriate frameworks and theories from business administration to research and assess contemporary issues in the field and relate to allied (professional) fields when appropriate.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU104	Introduction to Academic English For Business	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00

MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

ECON105	Principles of Microeconomics <sup>2</sup>	3.00
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<sup>2</sup> : Also counts towards the Major

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

MATH115	Calculus for Business & Economics <sup>3</sup>	3.00
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<sup>3</sup> : Also counts towards the Major

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
MGMT415	Strategic Management <sup>4</sup>	3.00
4 : Also counts towards the Major		

### College of Business

<b>Required Courses (45.00 hours)</b>		<b>Credit Hours</b>
ACCT100	Principles of Financial Accounting	3.00
ACCT225	Fundamental of Cost & Management Accounting	3.00
ECON125	Principles of Macroeconomics	3.00
ESPU240	Business Writing in English	3.00
FINC240	Principles of Financial Management	3.00
GBUS460	Internship	12.00
MGMT200	Fundamentals of Management	3.00
MIST200	Foundation of MIS & Technologies	3.00
MKTG200	Principles of Marketing	3.00
PRVT2652	Business Law (E)	3.00
SCML200	Supply Chain Management & Operations	3.00
STAT130	Statistics for Business	3.00

### Entrepreneurship Track

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
ENTR310	Innovation and Creativity	3.00
ENTR320	Entrepreneurship	3.00
ENTR330	Social Entrepreneurship	3.00
ENTR410	Managing Entrepreneurial Ventures	3.00
ENTR460	International Entrepreneurship	3.00

### Human Resources Development and Management Track

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
HRMD310	Organizational Behavior	3.00
HRMD320	Human Resources Management	3.00
HRMD330	Staffing Organizations	3.00
HRMD410	Human Resources Performance Management	3.00
HRMD420	Compensation & Benefits Management	3.00

## Marketing Track

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
MKTG310	Marketing Research	3.00
MKTG320	Consumer Behavior	3.00
MKTG330	Services Marketing	3.00
MKTG340	International Marketing	3.00
MKTG420	Strategic Marketing Management	3.00

## Supply Chain Management and Logistics Track

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
SCML310	Supply Chain & Logistics Modeling	3.00
SCML320	Procurement & Supply Management	3.00
SCML330	Logistics & Transportation Management	3.00
SCML410	Global Supply Chain & Logistics	3.00
SCML460	Supply Chain Applications Strategy	3.00

## Elective Courses for All Tracks

<b>Elective courses must come from tracks outside of the declared major. (15.00 hours)</b>		<b>Credit Hours</b>
ENTR310	Innovation and Creativity	3.00
ENTR320	Entrepreneurship	3.00
HRMD310	Organizational Behavior	3.00
MIST215	Computer Application in Business	3.00
MIST280	E-Business Strategy, Architecture & Design	3.00
MKTG310	Marketing Research	3.00
MKTG320	Consumer Behavior	3.00
SCML310	Supply Chain & Logistics Modeling	3.00
SCML320	Procurement & Supply Management	3.00

<b>Free Electives (6.00 hours)</b>	<b>Credit Hours</b>
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# **Bachelor of Management Information Systems**

The Management Information Systems (MIS) program offered by the Business Administration Department prepares students for a successful career by equipping them with effective analytical and managerial skills. Information systems are integral parts of government and business organizations that drive change and innovation. With the advent of social media and mobile technologies, information systems play a key role in society. Building on the core business curriculum, the MIS program provides students valuable skills in using cutting-edge software tools used in modern organizations and knowledge in the areas of analyzing business needs, designing new systems, project management, database management, and gaining actionable intelligence from business data. The program facilitates students to advance in both MIS and business skills with seven baskets: MIS, Human Resource Management and Development, Accounting, Finance, Entrepreneurship, Supply Chain Management and Logistics, and Marketing. Students can choose either a pure MIS or mixing the MIS with any one of the seven baskets.

## **Program Objectives**

- Effective communication skills.
- Critical thinking skills to the analysis and solution of MIS problems.
- Positive contribution to teams, as members and leaders.
- Ethical and social awareness at the local and global level.
- In-depth knowledge in the specialist field of MIS.

## **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Communicate effectively orally, using technologies to support the oral presentation of information where appropriate.
- Communicate effectively in writing, select and use information technology where appropriate.
- Apply appropriate technologies and techniques to the collection and analysis of information and derive appropriate conclusions for business problems.
- Research, critically evaluate and interpret information to accurately identify business problems and suggest solutions.
- Demonstrate autonomy and responsibility in their work.
- Apply teamwork skills and creativity in leadership and direction, appropriate to the context and level at which they are operating.
- Demonstrate ethical reasoning in relation to business issues.
- Develop an awareness of the civic responsibilities of business.
- Demonstrate comprehensive knowledge of key concepts across the breadth of effective application and use of MIS and innovative information technologies in organizations.

- Apply MIS knowledge to facilitate the acquisition, development, deployment, and management of information systems.
- Apply MIS knowledge to the exploitation of opportunities created by information technology innovations ensuring the alignment between MIS strategy and organizational strategy.
- Utilize appropriate enterprise frameworks, theories from the MIS to research and assess contemporary issues in the field and related allied fields and disciplines.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**

**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU104	Introduction to Academic English For Business	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00

HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
ECON105	Principles of Microeconomics <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH115	Calculus for Business & Economics <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00

CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
MGMT415	Strategic Management <sup>4</sup>	3.00
4 : Also counts towards the Major		

### College of Business

<b>Required Courses (45.00 hours)</b>		<b>Credit Hours</b>
ACCT100	Principles of Financial Accounting	3.00
ACCT225	Fundamental of Cost & Management Accounting	3.00
ECON125	Principles of Macroeconomics	3.00
ESPU240	Business Writing in English	3.00
FINC240	Principles of Financial Management	3.00
GBUS460	Internship	12.00
MGMT200	Fundamentals of Management	3.00
MIST200	Foundation of MIS & Technologies	3.00
MKTG200	Principles of Marketing	3.00
PRVT2652	Business Law (E)	3.00
SCML200	Supply Chain Management & Operations	3.00
STAT130	Statistics for Business	3.00

### Management Information Systems

<b>Major Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
MIST205	Introduction to Programming & Web B D	3.00
MIST220	MIS Analysis & Logical Design	3.00
MIST320	Data & Information Management	3.00
MIST360	MIS Project Management & Practice	3.00
MIST420	Business Intelligence & PM	3.00
MIST460	Enterprise Systems & MIS Strategy	3.00

## Accounting Track

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
ACCT235	Intermediate Accounting I	3.00
ACCT315	Principles of Auditing	3.00
ACCT351	Cost and Managerial Accounting	3.00
ACCT422	Accounting Information Systems	3.00
ACCT423	Advanced Accounting Information Systems	3.00

## Finance Track

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
FINC261	Financial Institutions & Risk Management	3.00
FINC341	Corporate Finance	3.00
FINC377	Investment	3.00
FINC348	International Finance	3.00
FINC475	Derivatives Securities	3.00

## Entrepreneurship Track

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
ENTR310	Innovation and Creativity	3.00
ENTR320	Entrepreneurship	3.00
ENTR330	Social Entrepreneurship	3.00
ENTR410	Managing Entrepreneurial Ventures	3.00
ENTR460	International Entrepreneurship	3.00
MIST280	E-Business Strategy, Architecture & Design	3.00

## Human Resource and Development Management Track

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
HRMD310	Organizational Behavior	3.00
HRMD320	Human Resources Management	3.00
HRMD330	Staffing Organizations	3.00
HRMD420	Compensation & Benefits Management	3.00

HRMD410	Human Resources Performance Management	3.00
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### Management Information System Track

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
ENTR320	Entrepreneurship	3.00
ENTR310	Innovation and Creativity	3.00
HRMD320	Human Resources Management	3.00
HRMD310	Organizational Behavior	3.00
MIST215	Computer Application in Business	3.00
MIST280	E-Business Strategy, Architecture & Design	3.00
SCML310	Supply Chain & Logistics Modeling	3.00
SCML320	Procurement & Supply Management	3.00
MKTG310	Marketing Research	3.00
MKTG320	Consumer Behavior	3.00

### Marketing Track

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
MIST280	E-Business Strategy, Architecture & Design	3.00
MKTG310	Marketing Research	3.00
MKTG320	Consumer Behavior	3.00
MKTG330	Services Marketing	3.00
MKTG340	International Marketing	3.00
MKTG420	Strategic Marketing Management	3.00

### Supply Chain Management Track

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
SCML310	Supply Chain & Logistics Modeling	3.00
SCML320	Procurement & Supply Management	3.00
SCML330	Logistics & Transportation Management	3.00
SCML410	Global Supply Chain & Logistics	3.00
SCML460	Supply Chain Applications Strategy	3.00

<b>Free Electives (6.00 hours)</b>		<b>Credit Hours</b>
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# Department of Economics and Finance

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## Bachelor of Economics

The Bachelor of Economics offered by the department of Economics and Finance aims to provide students with a solid understanding of economic theories, applied economics and statistical techniques. Driven by the need for Economics graduates with a good understanding of the contemporary economic challenges that the UAE is facing, such as the transition from an oil-based economy towards a knowledge-based economy, the Economics curriculum has been updated and enhanced to provide the graduates with a competitive edge, allowing them to fit into the current dynamics of the job market. Topics covered in the new curriculum include among others: Public Economics, Applied Economics of the Middle East, Environmental and Energy Economics, and Labor and HR Economics. Overall, the program prepares students to effectively use the acquired skills, which are important in many businesses and government agencies and engages them in exciting analyses of real-world economic issues.

### Program Objectives

- Effective communication skills.
- Critical thinking skills to the analysis and solution of Economics problems .
- Positive contribution to teams, as members and leaders.
- Ethical and social awareness at the local and global level .
- In-depth knowledge in a specialist field of business.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Communicate effectively orally, using technologies to support the oral presentation of information where appropriate.
- Communicate effectively in writing, select and use information technology where appropriate.
- Apply appropriate technologies and techniques to the collection and analysis of information and derive appropriate conclusions for economic problems.
- Research, critically evaluate and interpret information to accurately identify economic problems and suggest solutions.
- Demonstrate autonomy and responsibility in their work.
- Apply teamwork skills and creativity in leadership and direction, appropriate to the context and level at which they are operating.
- Demonstrate ethical reasoning in relation to Economic issues.
- Develop an awareness of the civic responsibilities of the Economics discipline.
- Demonstrate a comprehensive knowledge of key concepts across the breadth of Economic topics.

- Demonstrate a good knowledge of the functioning of economic markets and institutions from both a global and local perspective and be able to apply economic tools and concepts to real world problems.
- Utilize appropriate economic frameworks and theories to research and assess contemporary issues in the field and related allied fields where appropriate.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**  
**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU104	Introduction to Academic English For Business	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
ITBP119	Algorithms and Problem Solving <sup>1</sup>	3.00
1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00

HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

ECON105	Principles of Microeconomics <sup>2</sup>	3.00
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<sup>2</sup> : Also counts towards the Major

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

ACCT100	Principles of Financial Accounting	3.00
ECON105	Principles of Microeconomics	3.00
ARCH346	Contemporary World Architecture	3.00
AGRB360	Global Agri-food Trade	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

### Cluster 4: The Natural Sciences - Mathematics (3.00 hours)

Credit Hours

MATH115	Calculus for Business & Economics <sup>3</sup>	3.00
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<sup>3</sup> : Also counts towards the Major

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00

CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
MGMT415	Strategic Management <sup>4</sup>	3.00
4 : Also counts towards the Major		

### Colleges of Business

<b>Required Courses (45.00 hours)</b>		<b>Credit Hours</b>
ACCT100	Principles of Financial Accounting	3.00
ACCT225	Fundamental of Cost & Management Accounting	3.00
ECON125	Principles of Macroeconomics	3.00
ESPU240	Business Writing in English	3.00
FINC240	Principles of Financial Management	3.00
GBUS460	Internship	12.00
MGMT200	Fundamentals of Management	3.00
MIST200	Foundation of MIS & Technologies	3.00
MKTG200	Principles of Marketing	3.00
PRVT2652	Business Law (E)	3.00
SCML200	Supply Chain Management & Operations	3.00
STAT130	Statistics for Business	3.00

### Economics Program Requirements

<b>Required Course (18.00 hours)</b>		<b>Credit Hours</b>
ECON211	Theory of Microeconomics	3.00
ECON212	Theory of Macroeconomics	3.00
ECON215	Money and Banking	3.00
ECON231	Econometrics	3.00
ECON344	Public Economics	3.00
ECON433	Applied Economics of the Middle East	3.00

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
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ECON236	Project Economics	3.00
ECON237	Environmental and Energy Economics	3.00
ECON239	Competition and Business Strategy	3.00
ECON333	Economic Development and Institutions	3.00
ECON338	International Economics and Globalization	3.00
FINC344	Islamic Finance and Banking	3.00
ECON432	Research Methods in Economics	3.00
ECON441	Labor and HR Economics	3.00
ECON455	Selected Topics In Economics	3.00

**Free Electives (6.00 hours)**

**Credit Hours**

## **Bachelor of Finance and Banking**

The Bachelor of Finance and Banking offered by the Department of Economics and Finance prepares students for a challenging and rewarding career in an evolving business environment, where the know-how of all finance tools and techniques is a must. The finance major includes topics such as: Principles of Finance, Investment Analysis, Portfolio Management, Financial Derivatives, Corporate Finance, Islamic Finance and Banking, and much more, with emphasis placed on practical applications and real-life problem solving. Our program of study prepares graduates for decision-making positions in corporations and financial services firms such as banks, brokerage firms, investment companies and financial advisory houses.

### **Program Objectives**

- Effective communication skills.
- Critical thinking skills to the analysis and solution of Economics problems.
- Positive contribution to teams, as members and leaders.
- Ethical and social awareness.
- In-depth knowledge in a specialist field of business

### **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Communicate effectively orally, using technologies to support the oral presentation of information where appropriate.
- Communicate effectively in writing, select and use information technology where appropriate.
- Apply appropriate technologies and techniques to the collection and analysis of information and derive appropriate conclusions for finance problems.
- Research, critically evaluate and interpret information to accurately identify finance problems and suggest solutions.
- Demonstrate autonomy and responsibility in their work.
- Apply teamwork skills and creativity in leadership and direction, appropriate to the context and level at which they are operating.
- Demonstrate ethical reasoning in relation to Finance issues.
- Develop an awareness of the civic responsibilities of the Finance discipline.
- Demonstrate a comprehensive knowledge of key concepts across the breadth of Finance topics.
- Demonstrate a good knowledge of financial markets and institutions from both a global and local perspective and be able to apply finance tools and concepts to real world problems.
- Utilize appropriate finance frameworks and theories to research and assess contemporary issues in the field and related allied fields where appropriate.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU104	Introduction to Academic English For Business	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00

MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

ECON105	Principles of Microeconomics <sup>2</sup>	3.00
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<sup>2</sup> : Also counts towards the Major

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

MATH115	Calculus for Business & Economics <sup>3</sup>	3.00
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<sup>3</sup> : Also counts towards the Major

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
MGMT415	Strategic Management <sup>4</sup>	3.00
4 : Also counts towards the Major		

## College of Business

<b>Required Courses (45.00 hours)</b>		<b>Credit Hours</b>
ACCT100	Principles of Financial Accounting	3.00
ACCT225	Fundamental of Cost & Management Accounting	3.00
ECON125	Principles of Macroeconomics	3.00
ESPU240	Business Writing in English	3.00
FINC240	Principles of Financial Management	3.00
GBUS460	Internship	12.00
MGMT200	Fundamentals of Management	3.00
MIST200	Foundation of MIS & Technologies	3.00
MKTG200	Principles of Marketing	3.00
PRVT2652	Business Law (E)	3.00
SCML200	Supply Chain Management & Operations	3.00
STAT130	Statistics for Business	3.00

## Finance and Banking Program Requirements

<b>Required Courses (21.00 hours)</b>		<b>Credit Hours</b>
ECON215	Money and Banking	3.00
FINC261	Financial Institutions & Risk Management	3.00
FINC341	Corporate Finance	3.00
FINC377	Investment	3.00
FINC434	Financial Statement Analysis and Business Valuation	3.00
FINC348	International Finance	3.00
FINC475	Derivatives Securities	3.00

<b>Elective Courses (9.00 hours)</b>		<b>Credit Hours</b>
ECON212	Theory of Macroeconomics	3.00
ECON231	Econometrics	3.00
FINC344	Islamic Finance and Banking	3.00
FINC472	Portfolio Management	3.00
FINC463	Case Studies in Finance	3.00
FINC474	Selected Topics in Finance	3.00

<b>Free Electives (6.00 hours)</b>		<b>Credit Hours</b>
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# Department of Statistics

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## Bachelor of Statistics

The undergraduate program in Statistics at UAE introduces the fundamentals of probability and statistical inference (estimation & hypothesis testing) which cover design of experiments, sampling techniques and regression & time series analysis. Two distinctive features of the program are: the emphasis of business applications (e.g., forecasting financial & economic indicators, marketing surveys, audit sampling, decision making, quality control, etc.), and the reinforcement of lecture materials by closely integrated computer packages using real (local, where available) databases.

### Program Objectives

- Effective communication skills.
- Critical thinking skills to the analysis and solution of statistics problems.
- Positive contribution to teams, as members and leaders.
- Ethical and social awareness at the local and global level.
- In-depth knowledge in Statistics.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Communicate effectively orally statistical results and their interpretation to non-specialized audiences.
- Communicate in writing statistical results and their interpretation clearly and concisely using different formats and media.
- Integrate statistical and computing skills to develop comprehensive solutions to problems in their field of work.
- Research, critically evaluate and interpret information in identifying and formulating problems that can be solved using statistical techniques.
- Demonstrate autonomy and responsibility in their work.
- Apply teamwork skills and creativity in leadership and direction, appropriate to the context and level at which they are operating.
- Demonstrate ethical reasoning in relation to statistical issues.
- Develop an awareness of the civic responsibilities of the statistics discipline.
- Demonstrate a comprehensive knowledge of key concepts and methodologies in statistics.
- Identify the limitation and assumptions underlying statistical techniques and critically assess the validity of reported results.

- Demonstrate an understanding of allied knowledge and theories in related fields of work or disciplines.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**

**General Education (req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ehtics (3.00 hours)</b>		<b>Credit Hours</b>
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU104	Introduction to Academic English For Business	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00

1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Soceity (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00

LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

ECON105	Principles of Microeconomics <sup>2</sup>	3.00
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<sup>2</sup> : Also counts towards the Major

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

MATH115	Calculus for Business & Economics <sup>3</sup>	3.00
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<sup>3</sup> : Also counts towards the Major

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00

PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
MGMT415	Strategic Management <sup>4</sup>	3.00
4 : Also counts towards the Major		

## College of Business

<b>Required Courses (45.00 hours)</b>		<b>Credit Hours</b>
ACCT100	Principles of Financial Accounting	3.00
ACCT225	Fundamental of Cost & Management Accounting	3.00
ECON125	Principles of Macroeconomics	3.00
ESPU240	Business Writing in English	3.00
FINC240	Principles of Financial Management	3.00
GBUS460	Internship	12.00
MGMT200	Fundamentals of Management	3.00
MIST200	Foundation of MIS & Technologies	3.00
MKTG200	Principles of Marketing	3.00
PRVT2652	Business Law (E)	3.00
SCML200	Supply Chain Management & Operations	3.00
STAT130	Statistics for Business	3.00

## Statistics Major

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
STAT230	Principles of Probability	3.00
STAT331	Design Of Experiments	3.00
STAT338	Regression Analysis	3.00
STAT422	Sampling Techniques	3.00
STAT433	Time Series Analysis	3.00
STAT480	Seminar in Applied Statistics (E)	3.00

## Statistics Track

<b>Required Courses (6.00 hours)</b>		<b>Credit Hours</b>
STAT340	Mathematical Statistics	3.00
STAT462	Categorical Data Analysis	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
STAT242	Non-Parametric Statistics	3.00
STAT369	Demographic Analysis	3.00
STAT461	Applied Multivariate Analysis	3.00
STAT469	Statistical Quality Control	3.00
STAT472	Statistical Computing	3.00

### Information System Track

<b>Required Courses (6.00 hours)</b>		<b>Credit Hours</b>
MIST220	MIS Analysis & Logical Design	3.00
MIST320	Data & Information Management	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
MIST205	Introduction to Programming & Web B D	3.00
MIST215	Computer Application in Business	3.00
MIST280	E-Business Strategy, Architecture & Design	3.00

### Information Technology (IT) Track

<b>Required Courses (6.00 hours)</b>		<b>Credit Hours</b>
ITBP119	Algorithms and Problem Solving	3.00
ITBP219	Object Oriented Programming	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
ITBP205	Digital Design & Computer Organization	3.00
ITBP210	Communication & Networks Fundamentals	3.00
ITBP316	Human Computer Interaction	3.00
ITBP315	Operating Systems Fundamentals	3.00

### Finance and Banking Track

<b>Required Courses (6.00 hours)</b>		<b>Credit Hours</b>
ECON215	Money and Banking	3.00
FINC261	Financial Institutions & Risk Management	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
ECON231	Econometrics	3.00
FINC341	Corporate Finance	3.00
FINC344	Islamic Finance and Banking	3.00
FINC377	Investment	3.00
FINC472	Portfolio Management	3.00

<b>Free Electives (6.00 hours)</b>		<b>Credit Hours</b>
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# College of Education

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## Department of Curriculum & Instruction

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### Bachelor of Education in Elementary Education

This program provides students with the knowledge, skills and dispositions to become highly qualified educators at the elementary school level. The study plan includes a combination of academic and professional coursework with field experience in the classroom that prepares graduates for teaching in the real world. The program gives the students the opportunity to select a concentration track within four areas of Elementary Education. These concentration tracks include English Language, Islamic Studies and Arabic, Mathematics and Science, and Social Studies and Civics.

#### Program Objectives

- Understand the concepts, principles, theories, and research related to the development of children to construct learning opportunities that support individual students' development, acquisition of knowledge and language, and motivation.
- Demonstrate knowledge of instructional strategies and media communication techniques based on knowledge of students, learning theory, subject matter, curricular goals, and community to assist students in developing critical thinking, problem solving, and performance skills.
- Understand the formal and informal assessment strategies to plan, evaluate, and strengthen instruction that assist in promoting continuous intellectual, social, emotional, physical and health development of children in elementary schools.
- Develop awareness of lifelong professional development, professional ethics and partnerships and collaboration with colleagues, stakeholders, parents and community at large.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe major concepts, principles, theories, and research in specialized disciplines at the elementary education level.
- Develop instructional strategies based on knowledge of students, learning theories, subject matters, curricular goals, social norms, and different standards developed by stakeholders and specialized international agencies for elementary education.
- Employ formal and informal assessment strategies to plan, evaluate, and strengthen instruction in the elementary school.

- Use recent media communication techniques to foster active collaboration, and supportive interaction in the elementary schools to conduct research projects using appropriate research methods.
- Create learning opportunities that support individual students' development, acquisition of knowledge and motivation in the elementary school.
- Plan for elementary school instruction based on knowledge of diverse students, learning theories, subject matters, curricular goals, institutional and ethical standards and community.
- Use a variety of teaching and learning strategies and recent media communication techniques to encourage elementary school students' development of critical thinking, problem solving, research skills and performance skills.
- Demonstrate willingness, competence and strategies to work independently and in a team to respond to different situations and problems.
- Develop awareness, willingness and practices for lifelong career professional development.
- Develop relationships and partnership with families, colleagues and stakeholders to enhance elementary school children's intellectual, social, emotional, and physical growth.

## Degree Requirements

**Required Credit Hours : minimum 126 hours**

**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education <sup>1</sup>	3.00
1 : Also counts towards the Major		

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU103	Introduction to Academic English For Education	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
PHI180	Critical Thinking	3.00

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
PSY313	Educational Psychology <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
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MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
CURR421	Cap Exp in Elem/IsIm&Arab	3.00
CURR422	Cap Exp in ELEM/SS & CIVICS	3.00
CURR423	Cap Exp in ELEM/MATH & SC <sup>3</sup>	3.00
CURR424	Cap Exp in ELEM/English <sup>4</sup>	3.00
3 : Also counts towards the Major		
4 : Also counts towards the Major		

### Elementary Education Major

<b>Required Courses (21.00 hours)</b>		<b>Credit Hours</b>
CURR101	Educational Technology	3.00
CURR102	Principles of Curriculum & Instruction	3.00
CURR310	Classroom Assessment in Elementary Education	3.00
FOED201	School and Family	3.00
FOED350	Educational Research	3.00
SPED101	Education of Exceptional Children	3.00
PHED201	Physical Fitness and Wellness	3.00

<b>Supporting Elective Courses (3.00 hours)</b>		<b>Credit Hours</b>
CURR201	Language Ed in Elem School	3.00
FOED101	Learning Communities	3.00
FOED321	School Management & Supervision	3.00
SPED321	Gifted and Talented	3.00

## English Language Track

<b>Track Required Courses (33.00 hours)</b>		<b>Credit Hours</b>
ENG250	English Grammar & Usage	3.00
ENG300	Critical Reading in the Disciplines	3.00
ENG310	Writing for Research	3.00
ENG312	Cultural Literacy: English in the World	3.00
ENG450	Public Speaking and Debate	3.00
HSR100	Rhetoric and Composition 2A	3.00
LIT150	Introduction to Literature	3.00
LIT240	Survey of American Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG241	Syntax I	3.00
TSL210	English Phonetics	3.00

<b>Track Professional Education Courses (21.00 hours)</b>		<b>Credit Hours</b>
CURR206	Plan & Implement of ENGL CURR	3.00
CURR316	Teaching Methods of English for Young Learners	3.00
CURR358	Content and Pedagogy Development of ENGL-EL	3.00
CURR368	Teachings Methods of ENGL in ELEM	3.00
CURR464	Student Teaching in ELEM / ENGL <sup>5</sup>	9.00
<sup>5</sup> : Co-Requisite: CURR 421 Capstone Experience		

<b>Track Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
LIT200	Writing About literature	3.00
LIT220	Survey of British Literature	3.00
LNG341	Syntax II	3.00
LNG362	Contrastive Linguistics	3.00
TRS200	Introduction to Translation	3.00

## Islamic Studies and Arabic Language Track

<b>Track Required Courses (33.00 hours)</b>		<b>Credit Hours</b>
ARB110	Introduction to Syntax & Morphology	3.00
ARB120	Arabic Rhetoric I	3.00
ARB210	Phonetics	3.00

ARB270	Modern Arabic Gulf Literature	3.00
ARB311	Syntax II	3.00
ISLM110	Hadith Studies	3.00
ISLM2014		0.00
ISLM2033		0.00
ISLM2104		0.00
ISLM2303		0.00
ISLM2504		0.00

<b>Track Professional Education Courses (24.00 hours)</b>		<b>Credit Hours</b>
CURR200	Planning & Implement ISAR CURR	3.00
CURR351	Content and Pedagogy Development of ISLM-EL	3.00
CURR352	Content and Pedagogy Development of ARAB-EL	3.00
CURR361	Teach Islamic Education in Elementary	3.00
CURR362	Teaching Arabic in Elem School	3.00
CURR461	Student Teaching in ELEM / ISLM ED & AR <sup>6</sup>	9.00
6 : Co-Requisite: CURR 424 Capstone Experience		

<b>Track Elective Courses (Islamic) (3.00 hours)</b>		<b>Credit Hours</b>
ISLM3093		0.00
SHAR2082		0.00
SHAR402	Principles of Islamic Jurisprudence (Fiqh) 2	3.00

<b>Track Elective Courses (Arabic) (3.00 hours)</b>		<b>Credit Hours</b>
ARB100	Styles of Literary Expression	3.00
ARB130	Literary Texts Analysis	3.00
ARB160	General Linguistics	3.00

### Mathematics and Science Track

<b>Required Courses (33.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
BIOC270	General Genetics	3.00
BIOC275	Genetics Laboratory	1.00
CHEM111	General Chemistry I	3.00
CHEM115	General Chemistry Lab	1.00
GEOL105	Physical Geology	3.00

MATH105	Calculus I	3.00
MATH140	Linear Algebra I	3.00
MATH260	Foundation of Geometry	3.00
MATH305	Mathematics For Teachers I	3.00
MATH335	Mathematics for Teachers II	3.00
PHYS105	General Physics I	3.00
PHYS135	General Physics Lab I	1.00

<b>Track Professional Education Courses (24.00 hours)</b>		<b>Credit Hours</b>
CURR204	Plan & Implement of SCMA CURR	3.00
CURR356	Content and Pedagogy Development of MATH-ED	3.00
CURR357	Content and Pedagogy Development of SCIE_EL	3.00
CURR366	Teachings Methods of Math in ELEM	3.00
CURR367	Teaching Methods of SC in ELEM	3.00
CURR463	Student Teaching in ELEM / MATH & SC <sup>7</sup>	9.00
7 : Co-Requisite: CURR 423 Capstone Experience		

<b>Track Elective Courses (Mathematics) (3.00 hours)</b>		<b>Credit Hours</b>
MATH320	Numerical Analysis I	3.00
STAT101	Statistics in the Modern World	3.00
STAT245	Probability and Statistics for Education	3.00

<b>Track Elective Courses (Science) (3.00 hours)</b>		<b>Credit Hours</b>
BIOC250	Basic Ecology	3.00
CHEM281	Analytical Chemistry for Non-Majors	3.00
PHYS110	General Physics II	3.00

### Social Studies and Civics Track

<b>Track Required Courses (33.00 hours)</b>		<b>Credit Hours</b>
ECON110	Principles of Economics	3.00
GEO201	Physical Geography	3.00
GEO210	Human Geography	3.00
GEO220	Principles of Cartography	3.00
GEO432	Geography of the UAE	3.00
HIS142	History of Islamic World: Origins 1500	3.00
HIS318	History of the Arabian Gulf	3.00

HIS373	Hist. of Arab World from 1500	3.00
PSG120	Government & Politics of UAE	3.00
SOC101	Introduction to Sociology	3.00
SOC313	Sociology of Family	3.00

<b>Track Required Professional Education Courses (24.00 hours)</b>		<b>Credit Hours</b>
CURR202	Plan & Implement of SOCV CURR	3.00
CURR353	Content and Pedagogy Development of SOCI-EL	3.00
CURR354	Content and Pedagogy Development of CIVIC-EL	3.00
CURR363	Teaching Methods of SS in ELEM	3.00
CURR364	Teaching Methods of CIVICS in ELEM	3.00
CURR462	Student Teaching in ELEM / SS & CIVICS <sup>8</sup>	9.00
8 : Co-Requisite: CURR 422 Capstone Experience		

<b>Track Elective Courses (Civics) (3.00 hours)</b>		<b>Credit Hours</b>
PSG110	Fundamentals of Political Science	3.00
PSY205	Social Psychology	3.00
SOC309	Sociology of Organizations	3.00

<b>Track Elective Courses (Geography) (3.00 hours)</b>		<b>Credit Hours</b>
GEO221	Geographic Information Systems I	3.00
GEO332	Geography of the Arab World	3.00
GEO462	Current Environmental Issues	3.00

# **Bachelor of Education in Early Childhood Education**

This program provides students with the knowledge, skills and dispositions to become highly qualified educators who at the early childhood educational level. The study plan includes a combination of academic and professional coursework with field experience in the classroom that prepares graduates for teaching in the real world.

## **Program Objectives**

- Understand the child development and learning and provide all children with learning environments that are healthy, respectful, supportive, and challenging.
- Demonstrate an understanding of the value of diverse characteristics of families and communities and create respectful relationships with them in shaping children's development and learning.
- Apply effective assessment strategies and tools in partnership with families and other professionals to positively influence children's development and learning.
- Use a wide array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning.
- Integrate multiple areas of knowledge in planning, implementing and evaluating individually, culturally, and developmentally appropriate, meaningful and inclusive early childhood curriculum.
- Use reflection to make decisions and take actions based on professional and ethical standards related to early childhood practice and collaboratively participate in ongoing learning to inform their practice.
- Develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children across the entire developmental period of early childhood and in the variety of settings that offer early education

## **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Apply knowledge of child development and learning principles to provide children with healthy, respectful, and challenging learning environments.
- Build respectful partnerships with children's families and their communities and communicate with them effectively, both orally and in writing.
- Apply effective assessment strategies and tools in partnership with families and other professionals.
- Use a wide array of developmentally appropriate approaches and instructional strategies in partnership with families.
- Integrate multiple areas of knowledge in planning, implementing and evaluating developmentally appropriate and inclusive early childhood curriculum.

- Make decisions and take actions based on professional and ethical standards and develop reasoned and creative solutions.
- Develop the knowledge, skills and professional dispositions and maintain responsibility for self-development and life-long learning to promote the development and learning of young children.
- Apply a student-centered learning approach, by developing the student as a communicator, a thinker and a problem solver.
- Develop research skills necessary for integrating knowledge and concepts through effectively using information derived from a variety of sources.

## Degree Requirements

**Required Credit Hours : minimum 126 hours**  
**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education <sup>1</sup>	3.00
1 : Also counts towards the Major		

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU103	Introduction to Academic English For Education	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
PHI180	Critical Thinking	3.00

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

  

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00

HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

PSY313	Educational Psychology <sup>2</sup>	3.00
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<sup>2</sup> : Also counts towards the Major

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00

FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
CURR425	Capstone Experience in ECE <sup>3</sup>	3.00
3 : Also counts towards the Major		

### Early Childhood Education

<b>Required Courses (54.00 hours)</b>		<b>Credit Hours</b>
CURR101	Educational Technology	3.00
CURR103	Early Childhood Development & Learning	3.00
CURR211	Planning & Implementation of ECE Curriculum	3.00
CURR212	Language Development and Emergent Literacy	3.00
CURR311	Creative Arts for Young Children	3.00
CURR312	Development of Religious and Social Concepts in ECE	3.00
CURR314	Family, Community, Culture & ECE	3.00
CURR317	Child Health and Care	3.00
CURR319	Science Education for Young Child	3.00
CURR320	Math Education for Young Child	3.00
CURR324	Children's Play	3.00
CURR414	Early Childhood Learning Environments	3.00
CURR416	Assessment in ECE	3.00
CURR465	Student Teaching in ECE <sup>4</sup>	9.00
FOED350	Educational Research	3.00
SPED101	Education of Exceptional Children	3.00
4 : Co-Requisite: CURR 425 Capstone Experience		

<b>Supporting Required Courses Outside of ECED (30.00 hours)</b>		<b>Credit Hours</b>
ARB210	Phonetics	3.00
GEO432	Geography of the UAE	3.00
HIS212	History of the UAE	3.00
ISLM2014		0.00
ISLM2504		0.00

MATH305	Mathematics For Teachers I	3.00
MATH335	Mathematics for Teachers II	3.00
NSCI260	Natural Sciences I (Phys&Chem)	3.00
SOC316	Folklore in UAE Society	3.00
TSL210	English Phonetics	3.00

<b>Elective Courses (3.00 hours)</b>		<b>Credit Hours</b>
CURR411	Special Topic in ECE	3.00
FOED101	Learning Communities	3.00
SPED321	Gifted and Talented	3.00

## **Bachelor of Education in Art Education**

The Art Education Program is designed to prepare art teachers for grades K-9, Cycle 1 and Cycle 2 according to the classifications of Abu Dhabi Educational Council (ADEC) and the Ministry of Education. This program is offered in collaboration with the College of Humanities and Social Sciences. The major theme of the program is to prepare highly qualified Art teachers as professional practitioners.

### **Program Objectives**

- Actively seek opportunities for professional growth in art education and who become classroom researchers.
- Have the necessary academic background in art education, professional education knowledge, skills and dispositions to respond effectively to students' differences in education settings.
- Apply effective communication techniques to foster active inquiry, creative and innovative thinking, collaboration, and supportive interaction inside and outside the classroom.
- Apply effective communication techniques to foster active inquiry, creative and innovative thinking, collaboration, and supportive interaction inside and outside the classroom.
- Create positive communities of learners that encourage positive social interaction, active engagement in art learning, and self-motivation for all students.

### **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate skills in research methodology, problem solving, and critical thinking.
- Evaluate, manage, and apply appropriate art education methods and procedures in processes of investigation toward identified solutions independently and confidently as professional.
- Evaluate teacher-learner interactions to facilitate and guide student learning art in diverse learning environments.
- Appraise diversity and its impact on art curriculum and art instruction.
- Demonstrates an understanding of outcomes-based art curriculum.
- Develop, implement, and evaluate a personal approach to teaching and learning art through the use of information derived from a variety of art sources.
- Design, develop and implement appropriate art assessment techniques and tools.
- Plan and implement art curriculum as related to current trends.
- Outline the application of technology in art and effective communication techniques in grade K-9 settings.
- Function and communicate effectively within the social setting of the school, community and society.

## Degree Requirements

Required Credit Hours : minimum 126 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education <sup>1</sup>	3.00
1 : Also counts towards the major		

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU103	Introduction to Academic English For Education	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking	3.00

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00

PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

PSY313	Educational Psychology <sup>2</sup>	3.00
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2 : Also counts towards the major

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

### Cluster 5: Capstone Experience (3.00 hours)

Credit Hours

CURR426	Capstone Experiences in Art Education <sup>3</sup>	3.00
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3 : Co-Requisite: CURR 466 Student Teaching in Art Education and also counts towards the major

## Art Education Major

<b>Required Courses (84.00 hours)</b>		<b>Credit Hours</b>
ART101	Arts and Society I	3.00
ART201	Drawing I	3.00
ART301	Painting I	3.00
ART302	3-D Design	3.00
ART303	Digital Photography	3.00
ART382	Introduction to Art Criticism	3.00
CURR101	Educational Technology	3.00
CURR102	Principles of Curriculum & Instruction	3.00
CURR104	Introduction to Art Education	3.00
CURR213	Children's Artistic Development	3.00
CURR223	Assessment in Art Education	3.00
CURR224	Interpreting Art Experience: Social and Behavioral Perspectives	3.00
CURR301	Colour Theory	3.00
CURR302	Introduction to Art Museum Practices	3.00
CURR359	Early Field Experience in Cycle I	1.50
CURR360	Early Field Experience in Cycle II	1.50
CURR369	Teaching Art in Cycle I Schools	3.00
CURR370	Teaching Art in Cycle II Schools	3.00
CURR417	Art in Public Places	3.00
CURR466	Student Teaching in Art Education <sup>4</sup>	9.00
FIL312	Animation Filmmaking	3.00
FOED201	School and Family	3.00
PHED201	Physical Fitness and Wellness	3.00
FOED350	Educational Research	3.00
HIS133	Introduction to Art History	3.00
MSC462	Designing Media Messages	3.00
SPED101	Education of Exceptional Children	3.00
4 : Co-Requisite: CURR 426 Capstone Experience		

<b>Supporting Elective Courses (3.00 hours)</b>		<b>Credit Hours</b>
FOED101	Learning Communities	3.00
PHED311	Health & Movement	3.00
SPED321	Gifted and Talented	3.00

## **Bachelor of Education in Preparatory and Secondary Education**

The overall goal of the proposed Preparatory & Secondary Education Program (Cycles 2 & 3 according to the Ministry of Education's classification) is to prepare highly qualified teachers as professional practitioners who are able to contribute to the development of preparatory and secondary education in particular and education in the United Arab Emirates (UAE) in general. This four year teacher education program purports to prepare instructors to teach in grades 6 through 12.

### **Program Objectives**

- Teachers who are reflective practitioners and actively seek opportunities for professional growth to enhance both teaching and classroom based action research skills.
- Teachers who have the necessary academic background, professional educational knowledge, instructional skills and dispositions to respond effectively to students of diverse needs and abilities in preparatory & secondary education settings.
- Teachers who have an understanding of a variety of instructional strategies (including planning, implementation and assessment), curriculum, resources and tools to support students' development and to create effective student-centered learning environments.
- Teachers who can apply effective communication techniques to foster active inquiry, creative and innovative thinking skills, collaborative learning environments and supportive interaction inside and outside the classroom.
- Teachers who encourage to create positive communities of motivated learners and positive social interaction environments that support active engagement in learning.

### **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- acquire knowledge, skills, and attitudes necessary to function and communicate effectively within the social setting of the school, community, and society;
- apply knowledge and skills in research, problem solving, and critical thinking;
- evaluate the quality of teacher-learner interactions to facilitate and guide student learning in diverse learning environments;
- integrate information and communication technology into teaching and learning in grades (6-12) settings;
- demonstrate working knowledge and skills of design, development, and implementation of appropriate assessment strategies;
- reflect an understanding of diversity and its impact on curriculum and instruction;
- acquire the necessary skills to become an independent professional with a commitment to sustainable professional growth and development;
- implement curriculum as related to current trends and standards.

## Degree Requirements

Required Credit Hours : minimum 126 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU103	Introduction to Academic English For Education	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
PHI180	Critical Thinking	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

  

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
HIS133	Introduction to Art History	3.00
TRS200	Introduction to Translation	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
LNG110	Language, Society & Culture	3.00
PHI101	Introduction to Philosophy	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (N/A)</b>		<b>Credit Hours</b>
PSY313	Educational Psychology	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
HIS120	Arab & Islamic Civilization	3.00
HIS125	Contemporary Civilization	3.00
AGRB360	Global Agri-food Trade	3.00
PSG250	Principles of International Relations	3.00
GEO200	World Regional Geography	3.00
ARCH346	Contemporary World Architecture	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00
GEOL110	Planet Earth	3.00
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
CHEM181	Chemistry in the Modern World	3.00
PHED201	Physical Fitness and Wellness	3.00
VMED110	Introduction to Veterinary Medicine	3.00

<b>Cluster 5: Capstone Experience (Courses listed below also count as major courses) (3.00 hours)</b>		<b>Credit Hours</b>
CURR427	Capstone Experiences of Teaching Arabic Language in Preparatory & Secondary Schools	3.00
CURR428	Capstone Experiences of Teaching General Social Studies in Preparatory & Secondary Schools	3.00
CURR429	Capstone Experiences of Teaching Mathematics in Preparatory & Secondary Schools	3.00

CURR430	Capstone Experiences of Teaching English Language in Preparatory & Secondary Schools	3.00
CURR431	Capstone Experiences of Teaching Islamic Studies in Preparatory & Secondary Schools	3.00

### College of Education Professional Requirements (Req. CH:18)

<b>Core Requirements (15.00 hours)</b>		<b>Credit Hours</b>
FOED103	Foundation of Education	3.00
SPED102	Diversity and Student Learning	3.00
CURR105	Educational Technology in Preparatory & Secondary Schools	3.00
CURR300	Assesment in Preparatory & Secondary Schools	3.00
CURR303	Principle of Educational Research	3.00

<b>Elective Courses (3.00 hours)</b>		<b>Credit Hours</b>
CURR309	Classroom Environment & Adolescent Culture	3.00
SPED326	Educating Gifted and Talented Students in the Regular Classroom	3.00
FOED101	Learning Communities	3.00

### English Language Track (Req. CH:69)

<b>College of Education Specialization Core Requirements (15.00 hours)</b>		<b>Credit Hours</b>
CURR208	Curriculum Development in English Language	3.00
CURR218	Methods of Teaching English Language in Preparatory & Secondary Schools (1)	3.00
CURR308	Methods of Teaching English Language in Preparatory & Secondary Schools (2)	3.00
CURR333	Current Trends & Issues in Teaching English Language	3.00
CURR344	Thinking and Learning in Teaching English Language	3.00

<b>Track Requirements (39.00 hours)</b>		<b>Credit Hours</b>
ENG310	Writing for Research	3.00
ENG210	College Reading and Writing	3.00
ENG300	Critical Reading in the Disciplines	3.00
ENG312	Cultural Literacy: English in the World	3.00
LIT150	Introduction to Literature	3.00
LNG241	Syntax I	3.00
LNG100	Introduction to Linguistics	3.00

LNG120	Linguistic Principles of English Grammar	3.00
LNG330	Introduction to Phonology & Morphology	3.00
TSL100	Introduction to English Grammar	3.00
TSL110	Introduction to Applied Linguistics	3.00
TSL210	English Phonetics	3.00
TSL220	Pedagogical Structure	3.00

<b>Field Experiences (9.00 hours)</b>		<b>Credit Hours</b>
CURR470	Student Teaching of English Language in Preparatory & Secondary Schools	9.00

<b>Track Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
LIT240	Survey of American Literature	3.00
LIT220	Survey of British Literature	3.00
ENG450	Public Speaking and Debate	3.00
LIT300	Methods of Research in Literary Study	3.00

### General Social Studies Track (Req. CH:69)

<b>College of Education Specialization Core Requirements (15.00 hours)</b>		<b>Credit Hours</b>
CURR205	Curriculum Development in General Social Studies	3.00
CURR215	Methods of Teaching General Social Studies in Preparatory & Secondary Schools (1)	3.00
CURR305	Methods of Teaching General Social Studies in Preparatory & Secondary Schools (2)	3.00
CURR331	Current Trends & Issues in Teaching General Social Studies	3.00
CURR342	Thinking and Learning in Teaching General Social Studies	3.00

<b>Track Requirements (39.00 hours)</b>		<b>Credit Hours</b>
GEO201	Physical Geography	3.00
GEO211	Remote Sensing	3.00
GEO220	Principles of Cartography	3.00
GEO332	Geography of the Arab World	3.00
GEO432	Geography of the UAE	3.00
HIS124	Rise of Islam & Omayyed state	3.00
HIS212	History of the UAE	3.00
HIS318	History of the Arabian Gulf	3.00
HIS352	History of the Abbasid State	3.00
PSG120	Government & Politics of UAE	3.00

SOC101	Introduction to Sociology	3.00
SOC303	Bedouin & Rural Society	3.00
SOC316	Folklore in UAE Society	3.00

<b>Field Experiences (9.00 hours)</b>		<b>Credit Hours</b>
CURR468	Student Teaching of General Social Studies in Preparatory & Secondary Schools	9.00

<b>Track Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
GEO200	World Regional Geography	3.00
HIS310	Introduction to Archaeology & Museum Studies	3.00
HIS332	Ancient History & Archaeology Arabian of the Peninsula	3.00
PSG321	Gulf & Arabic Peninsula Affairs	3.00
PHI225	Citizenship & Civil Society	3.00
PHI226	Human Rights Theory	3.00
SOC201	Social & Cultural Change	3.00
SOC315	Sociology of Education	3.00
SOC260	Folklore	3.00
SWK230	Human Behavior in Social Environments	3.00

### Arabic Language Track (Req. CH:69)

<b>College of Education Specialization Core Requirements (15.00 hours)</b>		<b>Credit Hours</b>
CURR203	Curriculum Development in Arabic Language	3.00
CURR214	Methods of Teaching Arabic Language in Preparatory & Secondary Schools (1)	3.00
CURR304	Methods of Teaching Arabic Language in Preparatory & Secondary Schools (2)	3.00
CURR330	Current Trends & Issues in Teaching Arabic Language	3.00
CURR340	Thinking and Learning in Teaching Arabic Language	3.00

<b>Track Requirements (39.00 hours)</b>		<b>Credit Hours</b>
ARB110	Introduction to Syntax & Morphology	3.00
ARB120	Arabic Rhetoric I	3.00
ARB130	Literary Texts Analysis	3.00
ARB160	General Linguistics	3.00
ARB210	Phonetics	3.00
ARB220	Prosody	3.00
ARB230	Traditional Literary Criticism	3.00

ARB250	Abbasid Literature I	3.00
ARB311	Syntax II	3.00
ARB321	Semantics & Arabic Lexicology	3.00
ARB430	Modern Literature Criticism	3.00
ARB343	Pre-Islamic & Islamic Literature	3.00
ARB444	Modern Arabic Literature	3.00

<b>Field Experiences (9.00 hours)</b>		<b>Credit Hours</b>
CURR467	Student Teaching of Arabic Language in Preparatory & Secondary Schools	9.00

<b>Track Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
ARB260	Emirati Literature	3.00
ARB270	Modern Arabic Gulf Literature	3.00
ARB301	Abbasid Literature II	3.00
ARB413	Arabic Linguistics	3.00

### Islamic Studies Track (Req. CH:69)

<b>College of Education Specialization Core Requirements (15.00 hours)</b>		<b>Credit Hours</b>
CURR209	Curriculum Development in Islamic Studies	3.00
CURR219	Methods of Teaching Islamic Studies in Preparatory & Secondary Schools (1)	3.00
CURR306	Methods of Teaching Islamic Studies in Preparatory & Secondary Schools (2)	3.00
CURR334	Current Trends & Issues in Teaching Islamic Studies	3.00
CURR345	Thinking and Learning in Teaching Islamic Studies	3.00

<b>Track Requirements (39.00 hours)</b>		<b>Credit Hours</b>
ISLM110	Hadith Studies	3.00
ISLM111	Qur'anic Studies	3.00
ISLM112	Fiqh Of Sira	3.00
ISLM114	Recitation & Cantillation	3.00
ISLM201	Fiqh of Worship	3.00
ISLM202	Islamic Doctrine	3.00
ISLM203	Analytical Interpretation	3.00
SHAR208	Family Regulations in Islam	3.00
ISLM206	Studies in Hadith	3.00
ISLM207	Morals & Education in Islam	3.00

ISLM333	Figh of Islamic Da'wa	3.00
ISLM473	Mordern Islamic Legal Issues	3.00
SHAR112	Introduction to Islamic Law and its Sources	3.00

<b>Field Experiences (9.00 hours)</b>		<b>Credit Hours</b>
CURR471	Student Teaching of Islamic Studies in Preparatory & Secondary Schools	9.00

<b>Track Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
PHI362	Islamic Phliosophy	3.00
ISLM304	History Of Religions	3.00
ISLM305	Selected texts from the Quran and Sunnah	3.00
SHAR477	Transactions Jurisprudence	3.00

### Mathematics Track (Req. CH:69)

<b>College of Education Specialaization Core Requirements (15.00 hours)</b>		<b>Credit Hours</b>
CURR207	Curriculum Development in in Mathematics	3.00
CURR217	Methods of Teaching Mathematics in Preparatory & Secondary Schools (1)	3.00
CURR307	Methods of Teaching Mathematics in Preparatory Secondary Schools (2)	3.00
CURR332	Current Trends & Issues in Teaching Mathematics	3.00
CURR343	Thinking and Learning in Teaching Mathematics	3.00

<b>Track Requirements (39.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I	3.00
MATH110	Calculus II	3.00
MATH140	Linear Algebra I	3.00
MATH210	Calculus III	3.00
MATH215	Introduction to Analysis	3.00
MATH245	Set Theory and Logic	3.00
MATH246	Number Theory	3.00
MATH260	Foundation of Geometry	3.00
MATH315	Complex Analysis I	3.00
MATH342	Graph Theory	3.00
PHYS105	General Physics I	3.00
STAT245	Probability and Statistics for Education	3.00
STAT210	Probability and Statistics	3.00

<b>Field Experiences (9.00 hours)</b>		<b>Credit Hours</b>
CURR469	Student Teaching of Mathematics in Preparatory & Secondary Schools	9.00

<b>Track Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
MATH310	Real Analysis	3.00
MATH320	Numerical Analysis I	3.00
MATH321	Linear Programming	3.00
MATH340	Abstract Algebra 1	3.00

# Department of Physical Education

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## Bachelor of Education in Health and Physical Education

The Department of Physical Education at UAEU is committed to preparing students as successful teachers of health and physical education for all grades (K-12). Through their training in this program, students will make a valuable contribution to their society by serving as role models and lifestyle educators. Students will develop many competencies in a variety of movement skills, and in physical fitness as well as being capable of analyzing, synthesizing, and applying scientific knowledge to the practice of health and physical education. The Bachelor of Education in Health and Physical Education (HPE) at United Arab Emirates University can achieve this by enhancing the knowledge, skills, and dispositions of undergraduate HPE students.

### Program Objectives

- Teachers who possess and apply scientific knowledge in their area of specialization.
- Highly-qualified HPE teachers to meet both the Ministry of Education and Abu-Dhabi Education Council needs and requirements.
- HPE graduates who actively participate in various community health and physical activity programs.
- HPE teachers who can serve as role models and demonstrate knowledge of health, physical education, and wellness.
- Teachers who enthusiastically develop and execute research using various assessment methods that are technology-based to effectively measure and investigate health and wellness of individuals and society.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Recognizing and locating major concepts, theories, and research in the field of HPE (ILOs 3 and 1, CF 2, NASPE Standard 1, and AAHE 1).
- Understanding the structure and functions of body systems during physical exercise (ILO 1, CF 2, NASPE Standard 1, and AAHE 1).
- Critically analyzing various technology applications in HPE settings to enhance teaching, learning, and professional growth (ILO 5, CF 7).
- Using various assessment techniques in HPE settings and research. (ILOs 2, 4, Skill: QFE).
- Demonstrating competence in physical fitness and movement skills which can be effectively utilized in teaching (ILO 1, CF 5, and NASPE Standard 3).

- Recognizing individuals with different abilities and understanding the impact of such differences on teaching and learning (ILO 1, CF 3, NASPE Standard 3, and AAHE 4).
- Collaborating and communicating effectively with peers and students in school and community settings (ILO 6, CF 6, NASPE Standard 3 Advanced, and AAHE 7 & 8).
- Developing creative and effective approaches to manage HPE classroom settings (ILO 5, CF 8, NASPE Standard 6, and AAHE 8).

## Degree Requirements

**Required Credit Hours : minimum 126 hours**

**I - General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU103	Introduction to Academic English For Education	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
PHI180	Critical Thinking	3.00

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

  

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
PSY313	Educational Psychology	3.00

  

<b>Cluster 3: The Human Community - Humanities and Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00

HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
HIS133	Introduction to Art History	3.00
LIT150	Introduction to Literature	3.00
TRS200	Introduction to Translation	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
PHI101	Introduction to Philosophy	3.00

### **Cluster 3: The Human Community - The Global Experience (3.00 hours)**

**Credit Hours**

HIS120	Arab & Islamic Civilization	3.00
HIS125	Contemporary Civilization	3.00
AGRB360	Global Agri-food Trade	3.00
PSG250	Principles of International Relations	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
ARCH346	Contemporary World Architecture	3.00

### **Cluster 4: The Natural World - Mathematics (3.00 hours)**

**Credit Hours**

STAT101	Statistics in the Modern World	3.00
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### **Cluster 4: The Natural World - Natural Sciences (6.00 hours)**

**Credit Hours**

PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
PHED408	Capstone Experiences in Health and Physical Education	3.00

## II - Professional Requirements (Req: CH:48)

<b>A - Compulsory Professional Requirements (36.00 hours)</b>		<b>Credit Hours</b>
CURR101	Educational Technology	3.00
PHED200	Foundations of Health and Physical Education	3.00
PHED205	Adapted Physical Education	3.00
PHED206	School and Community Health	3.00
PHED305	Health and Physical Education Curriculum	3.00
PHED310	Health and PE Teaching Methods for Elementary Education	3.00
PHED312	Evaluation and Assessment in Health and Physical Education	3.00
PHED314	Biomechanics	3.00
FOED350	Educational Research	3.00
PHED401	Health and PE Teaching Methods for Secondary Education	3.00
PHED402	Exercise Psychology	3.00
PHED406	Aerobic Fitness	3.00

<b>B - Elective Professional Requirements (3.00 hours)</b>		<b>Credit Hours</b>
FOED101	Learning Communities	3.00
PHED311	Health & Movement	3.00
SPED321	Gifted and Talented	3.00
PHED403	Sport Sociology	3.00

<b>C - Field Experiences (9.00 hours)</b>		<b>Credit Hours</b>
PHED409	Student Teaching in Health and Physical Education	9.00

## III - Academic Major Requirements (Req. CH:39)

<b>A - Academic Major Requirements (36.00 hours)</b>		<b>Credit Hours</b>
PHED202	Invasion Games	2.00
PHED203	Swimming	2.00
PHED204	Human Anatomy and Physiology	4.00
PHED207	Exercise Physiology	3.00
PHED208	Motor Learning	3.00
PHED209	Track and Field	2.00

PHED302	Physical Fitness Conditioning	3.00
PHED306	Personal Health and Wellness	3.00
PHED308	CPR and First Aid	3.00
PHED309	Individual and Dual Sports	2.00
PSY304	Developmental Psychology	3.00
PHED313	Child and Health Development	3.00
PHED407	Health, Physical Activity, and Nutrition	3.00

<b>B - Elective Major Requirements (3.00 hours)</b>		<b>Credit Hours</b>
PHED400	Sport Management	3.00
PHED404	Techniques of Coaching	3.00
PHED405	Martial Arts	3.00

# Department of Special Education

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## Bachelor of Education in Special Education

Special Education means specially designed instruction to meet the unique needs of individuals with special needs. The B.A. in Special Education is designed for students interested in providing services to individuals with special needs. This program provides students with the knowledge, skills and dispositions to become highly qualified special educators who can help students with special needs achieve a higher level of personal self-sufficiency and success in school and in the community. The study plan includes a combination of academic and professional coursework with field experience in the classroom that prepares graduates for teaching in the real world. The program gives the students the opportunity to select a concentration track within two areas of Special Education. These concentration tracks include mild/moderate disabilities and gifted and talented.

### Program Objectives

- Acquire thorough knowledge of the philosophical, historical, and legal foundation of Special Education.
- Understand the diverse educational strengths and needs of all students with special needs.
- Acquire knowledge of the unique strategies, instructional approaches, and assessment which will promote maximum learning and social and emotional growth in all students with special needs.
- Establish a learning environment that supports the learning of all students.
- Understand the cultural and social contexts in which students with special needs live and learn.
- Gain communication skills needed to manage the complexities of teaching for learning in all educational settings.
- Have commitment to high standards of ethical practices and professionalism.
- Understand collaborative relationships and its value in fostering communication among schools, homes and the communities.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Acquire thorough knowledge of the philosophical, historical, and legal foundation of the education of exceptional children.
- Use multiple assessment data in making educational decisions for students with Mild/Moderate disabilities and Gifts and Talents.
- Locate and critically use relevant, meaningful, and evidence-based instructional and assistive technologies that will promote maximum learning and social and emotional growth in students with Mild/Moderate disabilities and Gifts and Talents.

- Establish a research-based responsive learning environment for students with Mild/Moderate disabilities and Gifts and Talents.
- Examine the cultural and social contexts in which students with exceptionalities live and learn.
- Assess language development and communication skills of children with exceptionalities using research-based practices.
- Use effective communication skills (oral and writing) and diverse collaborative models to promote the well-being of individuals with exceptionalities across a wide range of settings.
- Manage consistently and sensitively ethical practices and professionalism in the area of Special Education.
- Design research-based and appropriate learning experiences for students with Mild/Moderate disabilities and Gifts and Talents in academic subject matter content of the general curriculum.

## Degree Requirements

Required Credit Hours : minimum 126 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education <sup>1</sup>	3.00
1 : Also counts towards the Major		

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU103	Introduction to Academic English For Education	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
PHI180	Critical Thinking	3.00

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
PSY313	Educational Psychology <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS121	World History: Origins to 1500	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
SPED441	Capstone Experience in SPED/Mild/Mod Disabilities	3.00
SPED444	Capstone Experience in SPED/Gifted & Talented <sup>3</sup>	3.00
3 : Also counts towards the Major		

## College of Education

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
CURR101	Educational Technology	3.00
CURR102	Principles of Curriculum & Instruction	3.00
FOED101	Learning Communities	3.00
FOED350	Educational Research	3.00
SPED101	Education of Exceptional Children	3.00

## Special Education Major

<b>Required Courses (30.00 hours)</b>		<b>Credit Hours</b>
SPED210	Assessment in Special Education	3.00
SPED211	Technology Applications in Special Education	3.00
SPED220	Classroom Behavior Management	3.00
SPED221	Collaboration (Home, School & Community)	3.00
SPED222	Language & Communication Disorders	3.00
SPED313	Early Intervention in Special Education	3.00
SPED314	Differentiating Instruction	3.00
SPED321	Gifted and Talented	3.00
SPED332	Introduction to Rehabilitation	3.00

SPED400	Practical Experiences in Special Education	3.00
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<b>Supporting Required Courses Outside of SPED (18.00 hours)</b>		<b>Credit Hours</b>
ENG300	Critical Reading in the Disciplines	3.00
ENG310	Writing for Research	3.00
HIS422	Mod. & Con. History of Africa	3.00
MATH305	Mathematics For Teachers I	3.00
PSY100	Introduction to Psychology	3.00
PSY414	Introduction to Health Psychology	3.00

### Major Specialization Tracks

<b>Major Specialization Mild/Mod Disabilities (18.00 hours)</b>		<b>Credit Hours</b>
SPED312	Individuals with Mild/Moderate Disabilities	3.00
SPED361	Teaching Children with Mild/Moderate Disabilities	3.00
SPED415	Education Diagnosis/ Remediation of Literacy/Math Disabilities	3.00
SPED461	Student Teaching in SPED/Mild and Moderate Disabilities <sup>4</sup>	9.00
4 : Co-Requisite: SPED 441 Capstone Experience		

<b>Major Specialization Gifted and Talented (18.00 hours)</b>		<b>Credit Hours</b>
SPED331	Curriculum & Materials for the Gifted	3.00
SPED326	Educating Gifted and Talented Students in the Regular Classroom	3.00
SPED416	Research Seminar for Gifted & Talented	3.00
SPED464	Student Teaching in SPED/Gifted & Talented <sup>5</sup>	9.00
5 : Co-Requisite: SPED 444 Capstone Experience		

<b>Free Electives (6.00 hours)</b>		<b>Credit Hours</b>
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## College of Engineering

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### Department of Architectural Engineering

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#### Bachelor of Science in Architectural Engineering

The architectural engineering program prepares students to be effective players in shaping a sustainable built environment in the UAE and beyond. Students specializing in Architectural Engineering will explore engineering design, building construction, structures, electrical and mechanical systems and construction management. This makes architectural engineering an ideal profession for individuals with strong math and science skills who are interested in the built environment in general and buildings in particular. The program and department activities reflect an outcomes-oriented approach, adopting hands-on active learning and emphasizing professional competency and skills building while introducing students to innovative approaches to knowledge delivery and use of computational design tools. Teamwork is also a key part of the study of architectural engineering as architectural engineers will interact with the other design professionals in the execution of building projects. The Architectural Engineering undergraduate program in the College of Engineering at the United Arab Emirates University is accredited by the Engineering Accreditation Commission of ABET. For more details on this program, [click here](#).

#### Program Objectives

- Efficiently use relevant building engineering knowledge and skills in professional practice.
- Effectively design and evaluate architectural engineering systems to satisfy client needs according to engineering specifications and interdisciplinary requirements.
- Successfully manage real life engineering problems to achieve practical and optimal solutions.
- Commit to social, economic, and environmental issues and practice high ethical standards in the profession.
- Develop leadership, collaboration and technical communications skills; and update knowledge through lifelong learning.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Outcome A: An ability to apply knowledge of math, science, and engineering
- Outcome B: An ability to design and conduct experiments, as well as to analyze and interpret data
- Outcome C: An ability to design and evaluate building engineering systems, components, or processes to meet desired needs
- Outcome D: An ability to function on multi-disciplinary teams
- Outcome E: An ability to identify, formulate, and solve engineering problems

- Outcome F: An understanding of professional and ethical responsibility
- Outcome G: An ability to communicate effectively
- Outcome H: The broad education necessary to understand the impact of engineering solutions in a global and societal context
- Outcome I: A recognition of the need for, and an ability to engage in lifelong learning
- Outcome J: A knowledge of contemporary issues
- Outcome K: An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

## Degree Requirements

**Required Credit Hours : minimum 147 hours**  
**General Education (Req. CH:42)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	<a href="#">Islamic Culture</a>	3.00

  

<b>Cluster 1: Values to Live By - Ethics (2.00 hours)</b>		<b>Credit Hours</b>
GENG215	<a href="#">Engineering Ethics</a> <sup>1</sup>	2.00
1 : Also counts towards the Major		

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU107	Introduction to Academic English For Engineering	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	<a href="#">Scientific Research Skills</a>	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	<a href="#">Creative &amp; Innovative Thinking Skills</a>	3.00
PHI180	<a href="#">Critical Thinking</a> <sup>2</sup>	3.00
2 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	<a href="#">Emirates Studies</a>	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	<a href="#"><u>History and Theory of Architecture</u></a> <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
GENG315	<a href="#"><u>Engineering Economics</u></a> <sup>4</sup>	3.00
4 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
ARCH346	<a href="#"><u>Contemporary World Architecture</u></a> <sup>5</sup>	3.00
5 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH1110	<a href="#"><u>Calculus I for Engineering</u></a> <sup>6</sup>	3.00
6 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (7.00 hours)</b>		<b>Credit Hours</b>
CHEM111	<a href="#"><u>General Chemistry I</u></a>	3.00
PHYS1110	<a href="#"><u>Physics I for Engineering</u></a> <sup>7</sup>	4.00
7 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (6.00 hours)</b>		<b>Credit Hours</b>
ARCH585	<a href="#"><u>Graduation Project I</u></a>	3.00
ARCH590	<a href="#"><u>Graduation Project II</u></a> <sup>8</sup>	3.00
8 : Also counts towards the Major		

## College of Engineering

<b>Required Courses (20.00 hours)</b>		<b>Credit Hours</b>
CHEM175	<a href="#"><u>Chemistry Lab I for Engineering</u></a>	1.00
GENG220	<a href="#"><u>Engineering Thermodynamics</u></a>	3.00
MATH1120	<a href="#"><u>Calculus II for Engineering</u></a>	3.00
MATH2210	<a href="#"><u>Differential Equations for Engineering</u></a>	3.00
MATH2220	<a href="#"><u>Linear Algebra for Engineering</u></a>	3.00

PHYS1120	<a href="#">Physics II for Engineering</a>	4.00
STAT210	<a href="#">Probability and Statistics</a>	3.00

## Architectural Engineering

<b>Required Courses (70.00 hours)</b>		<b>Credit Hours</b>
ARCH315	<a href="#">Building Construction Systems</a>	3.00
ARCH320	<a href="#">Introductory Building Design Studio</a>	3.00
ARCH325	<a href="#">Building Construction Components</a>	3.00
ARCH335	<a href="#">Intermediate Building Design Studio</a>	3.00
ARCH341	<a href="#">Building Electrical Circuits</a>	2.00
ARCH342	<a href="#">Building Acoustics &amp; Illumination</a>	3.00
ARCH345	<a href="#">Building Engineering Systems</a>	3.00
ARCH495	<a href="#">Professional Practical Training</a>	15.00
ARCH410	<a href="#">Advanced Building Construction Systems</a>	3.00
ARCH418	<a href="#">Structural Steel Design for Buildings</a>	3.00
ARCH440	<a href="#">Construction Project Management</a>	3.00
ARCH430	<a href="#">Integrated Building Design Studio</a>	3.00
ARCH433	<a href="#">Environmental Systems &amp; Control</a>	3.00
ARCH457	<a href="#">Reinforced Concrete Design for Architectural Engineering</a>	3.00
CIVL310	<a href="#">Structural Analysis</a>	3.00
CIVL345	<a href="#">Fluid Mechanics Civil &amp; Architecture Engineers</a>	3.00
CIVL358	<a href="#">Surveying for Architectural Engineering</a>	2.00
CIVL240	<a href="#">Statics</a>	3.00
MECH305	<a href="#">Mechanics of Materials</a>	3.00
ARCH450	<a href="#">Construction Project Planning and Control</a>	3.00

<b>Architecture Elective Courses (9.00 hours)</b>		<b>Credit Hours</b>
ARCH501	<a href="#">Advanced Building Design Studio</a>	3.00
ARCH502	<a href="#">UAE Architectural Heritage</a>	3.00
ARCH503	<a href="#">Building Construction Detailing</a>	3.00
ARCH509	<a href="#">Modeling and Simulation</a>	3.00
ARCH526	<a href="#">Specification and Quantity Surveying</a>	3.00
ARCH527	<a href="#">Landscape Architecture and Planning</a>	3.00
ARCH521	<a href="#">Advanced Buildings Reinforced Concrete Design</a>	3.00
ARCH532	<a href="#">Sustainable Architecture &amp; Urban Environments in Hot Climate</a>	3.00
ARCH530	<a href="#">Selected Topics In Architecture Engineering</a>	3.00

ARCH542	<a href="#">Housing and Urban Design</a>	3.00
ARCH551	<a href="#">Urban Planning &amp; Infrastructure</a>	3.00
ARCH562	<a href="#">Construction Contracts</a>	3.00
CIVL510	<a href="#">Special Topics in Structural Engineering</a>	3.00
CIVL531	<a href="#">Topographic Surveying</a>	3.00
CIVL552	<a href="#">Advanced Steel Design</a>	3.00

<b>Math and Science Electives (6.00 hours)</b>		<b>Credit Hours</b>
BIOC100	<a href="#">Basic Biology I</a>	3.00
BIOE240	<a href="#">Principles of Environmental Science</a>	3.00
GEOL105	<a href="#">Physical Geology</a>	3.00
MATH205	<a href="#">Set Theory and Logic</a>	3.00
MATH260	<a href="#">Foundation of Geometry</a>	3.00

# Department of Chemical & Petroleum Engineering

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## Bachelor of Science in Chemical Engineering

Chemical Engineering is concerned with the manufacturing of products from laboratory bench-scale testing to full production through deep knowledge of fluid mechanics, heat transfer, mass transfer, chemical reaction kinetics, equipment design, plant design, process dynamics and control as well as process safety, economics, and management. It has an impact on essentially everything on our daily life from food processing to producing pharmaceutical drugs, generating fuels and even the manufacturing of silicon chips and other microelectronics. At the Chemical and Petroleum Engineering Department, we strive to help students see how a Chemical Engineering degree can accomplish their dreams and we establish the means to make it happen. The Chemical Engineering undergraduate program in the College of Engineering at the United Arab Emirates University is accredited by the Engineering Accreditation Commission of ABET. For more details on this program, [click here](#).

### Program Objectives

- PEO-1: Have successful careers in various fields related to chemical engineering and have leadership roles in industry/organizations.
- PEO-2: Demonstrate high level of professionalism, commitment to ethical and social responsibility, and desire for life-long learning.
- PEO-3: Demonstrate innovative solutions for the industry through creative thinking.
- PEO-4: Pursue advanced degrees and careers in engineering, academia, research and development, or business.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Thorough grounding in chemistry, physics, biology, math and engineering subjects such as fluid mechanics, thermodynamics, heat transfer, mass transfer, and reaction kinetics; and the ability to apply knowledge of these subjects in chemical engineering practice. (A)
- An ability to design and conduct different chemical engineering experiments, as well as to analyze and interpret data. (B)
- An ability to analyze, design, and control a system, component and/or process dealing with fluids handling, separation, and chemical/biochemical reactions to meet desired needs (C)
- An ability to work and interact effectively in groups/teams which have diverse personalities, cultures, and backgrounds. (D)
- Ability to identify, formulate, and solve chemical engineering problems (E)
- An understanding of professional and ethical responsibility (F)

- Ability to develop effective oral, written, and interpersonal communication skills. (G)
- Ability to evaluate the potential risks, i.e. consequences and probabilities of engineering solutions which may affect society and the environment. (H)
- A recognition of the need for and an ability to engage in independent-learning and life-long learning (I)
- A knowledge of contemporary issues (J)
- An ability to use of computer software such as spreadsheets, mathematics packages, word processors, and design packages in solution of chemical engineering problems. (K)

## Degree Requirements

**Required Credit Hours : minimum 147 hours**  
**General Education (req. CH:42)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	<a href="#">Islamic Culture</a>	3.00

<b>Cluster 1: Values to Live By - Ethics (2.00 hours)</b>		<b>Credit Hours</b>
GENG215	<a href="#">Engineering Ethics</a> <sup>1</sup>	2.00
1 : Also counts towards the Major		

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU107	Introduction to Academic English For Engineering	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	<a href="#">Scientific Research Skills</a>	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	<a href="#">Creative &amp; Innovative Thinking Skills</a>	3.00
PHI180	<a href="#">Critical Thinking</a> <sup>2</sup>	3.00
2 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	<a href="#">Emirates Studies</a>	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	<a href="#"><u>History and Theory of Architecture</u></a>	3.00
HIS133	<a href="#"><u>Introduction to Art History</u></a>	3.00
HSR120	<a href="#"><u>Introduction to Heritage &amp; Culture</u></a>	3.00
HSR130	<a href="#"><u>Introduction to Language &amp; Communication</u></a>	3.00
LIT150	<a href="#"><u>Introduction to Literature</u></a>	3.00
LNG100	<a href="#"><u>Introduction to Linguistics</u></a>	3.00
LNG110	<a href="#"><u>Language, Society &amp; Culture</u></a>	3.00
MSC200	<a href="#"><u>Introduction to Mass Media</u></a>	3.00
MSC240	<a href="#"><u>World and Arab Media</u></a>	3.00
PHI101	<a href="#"><u>Introduction to Philosophy</u></a>	3.00
PHI270	<a href="#"><u>Philosophy of Education</u></a>	3.00
PHI271	<a href="#"><u>History and Philosophy of Science</u></a>	3.00
TRS200	<a href="#"><u>Introduction to Translation</u></a>	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
GENG315	<a href="#"><u>Engineering Economics</u></a> <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	<a href="#"><u>Global Agri-food Trade</u></a>	3.00
ARCH346	<a href="#"><u>Contemporary World Architecture</u></a>	3.00
BIOE240	<a href="#"><u>Principles of Environmental Science</u></a>	3.00
GEO200	<a href="#"><u>World Regional Geography</u></a>	3.00
HIS120	<a href="#"><u>Arab &amp; Islamic Civilization</u></a>	3.00
HIS121	<a href="#"><u>World History: Origins to 1500</u></a>	3.00
HIS125	<a href="#"><u>Contemporary Civilization</u></a>	3.00
PSG250	<a href="#"><u>Principles of International Relations</u></a>	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH1110	<a href="#"><u>Calculus I for Engineering</u></a> <sup>4</sup>	3.00
4 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (7.00 hours)</b>		<b>Credit Hours</b>
CHEM111	<a href="#">General Chemistry I</a>	3.00
PHYS1110	<a href="#">Physics I for Engineering</a> <sup>5</sup>	4.00
5 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (6.00 hours)</b>		<b>Credit Hours</b>
CHME585	<a href="#">Graduation Project I</a>	3.00
CHME590	<a href="#">Graduation Project II</a> <sup>6</sup>	3.00
6 : Also counts towards the Major		

### College of Engineering

<b>Required Courses (23.00 hours)</b>		<b>Credit Hours</b>
CHEM175	<a href="#">Chemistry Lab I for Engineering</a>	1.00
GENG220	<a href="#">Engineering Thermodynamics</a>	3.00
MATH1120	<a href="#">Calculus II for Engineering</a>	3.00
MATH2210	<a href="#">Differential Equations for Engineering</a>	3.00
MATH2220	<a href="#">Linear Algebra for Engineering</a>	3.00
PHYS1120	<a href="#">Physics II for Engineering</a>	4.00
STAT210	<a href="#">Probability and Statistics</a>	3.00
ELEC330	<a href="#">Computer Programming</a>	3.00

### Chemical Engineering

<b>Required Courses (70.00 hours)</b>		<b>Credit Hours</b>
BIOC100	<a href="#">Basic Biology I</a>	3.00
CHEM112	<a href="#">General Chemistry II</a>	2.00
CHEM251	<a href="#">Physical Chemistry I</a>	3.00
CHEM351	<a href="#">Physical Chemistry II</a>	3.00
CHEM282	<a href="#">Organic Chemistry for Non-Majors</a>	3.00
CHEM355	<a href="#">Physical Chemistry Lab I</a>	1.00
CHME300	<a href="#">Introduction to Chemical Engineering</a>	3.00
CHME310	<a href="#">Computer Applications in Chemical Engineering</a>	1.00
CHME322	<a href="#">Chemical Engineering Thermodynamics</a>	3.00
CHME330	<a href="#">Chemical Engineering Fluid Mechanics</a>	3.00
CHEM3707	<a href="#">Instrumental Analysis for Chemical Engineering</a>	2.00
CHME411	<a href="#">Reactor Design</a>	3.00

CHME413	<a href="#">Heat Transfer</a>	3.00
CHME418	<a href="#">Chemical Eng Laboratory I</a>	2.00
CHME421	<a href="#">Mass Transfer</a>	3.00
CHME495	<a href="#">Industrial Training</a>	15.00
CHME506	<a href="#">Process Modeling &amp; Simulation</a>	3.00
CHME508	<a href="#">Process Control</a>	3.00
CHME510	<a href="#">Process and Plant Design</a>	3.00
CHME517	<a href="#">Mass Transfer Operations</a>	3.00
CHME519	<a href="#">Chemical Engineering Lab II</a>	2.00
CHME390	<a href="#">Engineering and Strength of Materials</a>	3.00

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
CHEM283	<a href="#">Biochemistry for Non-Majors</a>	3.00
PETE424	<a href="#">Safety &amp; Environment Impact</a>	3.00
CHME433	<a href="#">Water Desalination</a>	3.00
CHME441	<a href="#">Industrial &amp; Wastewater Treatment</a>	3.00
CHME442	<a href="#">Corrosion</a>	3.00
CHME444	<a href="#">Renewable Energy Sources</a>	3.00
CHME452	<a href="#">Biochemical Treatment</a>	3.00
CHME453	<a href="#">Biofuels Technology</a>	3.00
CHME454	<a href="#">Biochemical Separation</a>	3.00
CHME457	<a href="#">Fundamentals of Biochemical Engineering</a>	3.00
CHME461	<a href="#">Natural Gas Processing</a>	3.00
CHME462	<a href="#">Petroleum Refining Engineering</a>	3.00
CHME463	<a href="#">Petrochemical Technology</a>	3.00
CHME464	<a href="#">Polymer Engineering</a>	3.00
CHME570	<a href="#">Special Topics in Chemical Engineering</a>	3.00
CHME575	<a href="#">Independent Studies in Chemical Engineering</a>	3.00

# Bachelor of Science in Petroleum Engineering

Petroleum engineering refers to the subsurface engineering activities related to the production of hydrocarbons, which can be either crude oil or gas. Petroleum Engineering focuses on maximizing economic recovery of hydrocarbons from subsurface reservoirs and estimation of the recoverable volume of this resource using a detailed understanding of the physical behavior of Oil, water and gas within porous rock at very high pressure. Petroleum Engineering requires a good knowledge of many other related disciplines, such as Geology, Petrophysics, Geophysics, and Petroleum Geology. Improvements in computer modeling, materials and the application of statistics, probability analysis have drastically improved the toolbox of the petroleum engineer in recent decades. The Petroleum Engineering undergraduate program in the College of Engineering at the United Arab Emirates University is accredited by the Engineering Accreditation Commission of ABET. For more details on this program, [click here](#).

## Program Objectives

- PEO-1: Have successful careers in various fields related to petroleum engineering and have leadership roles in industry/organizations.
- PEO-2: Demonstrate high level of professionalism, commitment to ethical and social responsibility, and desire for life-long learning.
- PEO-3: Demonstrate innovative solutions for the petroleum industry through creative thinking.
- PEO-4: Pursue advanced degrees and careers in engineering, academia, research and development, or business.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Competency in mathematics through differential equations, linear algebra, probability, and statistics; and engineering subjects including strength of materials, fluid mechanics, and thermodynamics; and ability to apply these courses to practical petroleum engineering problems. (A)
- Ability to design and conduct different petroleum laboratory experiments, as well as to analyze and interpret laboratory and field data. (B)
- Competency in petroleum engineering including design and analysis of well systems, procedures for drilling and completing wells, characterization and evaluation of subsurface geological formations, design and analysis of systems for producing, injecting, lifting and handling fluids; application of reservoir engineering principles and practices for optimizing resource development and management; use of project economics and resource valuation methods for design and decision making under conditions of risk and uncertainty. (C)
- Ability to work and interact effectively in groups/teams which have diverse personalities, cultures, and backgrounds. (D)
- Ability to identify, formulate, and solve practical petroleum engineering problems. (E)

- Understanding of professional and ethical responsibility.(F)
- Ability to develop effective oral, written, and interpersonal communication skills. (G)
- Ability to evaluate potential risks, i.e. consequences and probabilities of engineering solutions which may affect the society and environment. (H)
- Recognition of the need for and an ability to engage in independent-learning and life-long learning. (I)
- Knowledge of contemporary issues related to the petroleum industry. (J)
- Ability to use computer software such as spreadsheets, mathematics packages, word processors, reservoir simulation models, and design packages in solution of petroleum engineering problems. (K)

## Degree Requirements

**Required Credit Hours : minimum 147 hours**  
**General Education (Req. CH:42)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	<a href="#"><u>Islamic Culture</u></a>	3.00

  

<b>Cluster 1: Values to Live By - Ethics (2.00 hours)</b>		<b>Credit Hours</b>
GENG215	<a href="#"><u>Engineering Ethics</u></a> <sup>1</sup>	2.00
1 : Also counts towards the Major		

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU107	Introduction to Academic English For Engineering	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	<a href="#"><u>Scientific Research Skills</u></a>	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	<a href="#"><u>Critical Thinking</u></a> <sup>2</sup>	3.00
PSY105	<a href="#"><u>Creative &amp; Innovative Thinking Skills</u></a>	3.00
2 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	<a href="#"><u>Emirates Studies</u></a>	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	<a href="#"><u>History and Theory of Architecture</u></a>	3.00
HIS133	<a href="#"><u>Introduction to Art History</u></a>	3.00
HSR120	<a href="#"><u>Introduction to Heritage &amp; Culture</u></a>	3.00
HSR130	<a href="#"><u>Introduction to Language &amp; Communication</u></a>	3.00
LIT150	<a href="#"><u>Introduction to Literature</u></a>	3.00
LNG100	<a href="#"><u>Introduction to Linguistics</u></a>	3.00
LNG110	<a href="#"><u>Language, Society &amp; Culture</u></a>	3.00
MSC200	<a href="#"><u>Introduction to Mass Media</u></a>	3.00
MSC240	<a href="#"><u>World and Arab Media</u></a>	3.00
PHI101	<a href="#"><u>Introduction to Philosophy</u></a>	3.00
PHI270	<a href="#"><u>Philosophy of Education</u></a>	3.00
PHI271	<a href="#"><u>History and Philosophy of Science</u></a>	3.00
TRS200	<a href="#"><u>Introduction to Translation</u></a>	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
GENG315	<a href="#"><u>Engineering Economics</u></a> <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	<a href="#"><u>Global Agri-food Trade</u></a>	3.00
ARCH346	<a href="#"><u>Contemporary World Architecture</u></a>	3.00
BIOE240	<a href="#"><u>Principles of Environmental Science</u></a>	3.00
GEO200	<a href="#"><u>World Regional Geography</u></a>	3.00
HIS120	<a href="#"><u>Arab &amp; Islamic Civilization</u></a>	3.00
HIS121	<a href="#"><u>World History: Origins to 1500</u></a>	3.00
HIS125	<a href="#"><u>Contemporary Civilization</u></a>	3.00
PSG250	<a href="#"><u>Principles of International Relations</u></a>	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
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MATH1110	<a href="#">Calculus I for Engineering</a> <sup>4</sup>	3.00
4 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (7.00 hours)</b>		<b>Credit Hours</b>
CHEM111	<a href="#">General Chemistry I</a>	3.00
PHYS1110	<a href="#">Physics I for Engineering</a> <sup>5</sup>	4.00
5 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (6.00 hours)</b>		<b>Credit Hours</b>
PETE585	<a href="#">Graduation Project I</a>	3.00
PETE590	<a href="#">Graduation Project II</a> <sup>6</sup>	3.00
6 : Also counts towards the Major		

### College of Engineering

<b>Required Courses (23.00 hours)</b>		<b>Credit Hours</b>
CHEM175	<a href="#">Chemistry Lab I for Engineering</a>	1.00
GENG220	<a href="#">Engineering Thermodynamics</a>	3.00
MATH1120	<a href="#">Calculus II for Engineering</a>	3.00
MATH2220	<a href="#">Linear Algebra for Engineering</a>	3.00
MATH2210	<a href="#">Differential Equations for Engineering</a>	3.00
PHYS1120	<a href="#">Physics II for Engineering</a>	4.00
STAT210	<a href="#">Probability and Statistics</a>	3.00
ELEC330	<a href="#">Computer Programming</a>	3.00

### Petroleum Engineering

<b>Required Courses (70.00 hours)</b>		<b>Credit Hours</b>
GEOL115	<a href="#">Physical Geology for Petroleum Engineering</a>	3.00
CHEM282	<a href="#">Organic Chemistry for Non-Majors</a>	3.00
CHME330	<a href="#">Chemical Engineering Fluid Mechanics</a>	3.00
PETE290	<a href="#">Introduction to Petroleum Engineering</a>	1.00
PETE305	<a href="#">Reservoir Rock &amp; Fluid Properties</a>	3.00
PETE308	<a href="#">Drilling Engineering I</a>	3.00
PETE320	<a href="#">Reservoir Mechanics</a>	3.00
PETE362	<a href="#">Data Analysis in Petroleum Engineering</a>	1.00
PETE403	<a href="#">Well Logging</a>	3.00

PETE407	<a href="#">Drilling Engineering II</a>	2.00
PETE315	<a href="#">Reservoir Rock &amp; Fluid Properties lab</a>	2.00
PETE409	<a href="#">Natural Gas Engineering</a>	3.00
PETE413	<a href="#">Applied Reservoir Geology</a>	3.00
PETE419	<a href="#">Well Performance</a>	3.00
PETE422	<a href="#">Reservoir Simulation</a>	3.00
PETE495	<a href="#">Industrial Training</a>	15.00
PETE507	<a href="#">Well Testing</a>	3.00
PETE512	<a href="#">Petroleum Production Operations</a>	3.00
PETE519	<a href="#">Secondary Recovery Methods</a>	3.00
PETE520	<a href="#">Fluid Flow in Porous Media Lab</a>	1.00
PETE542	<a href="#">Petroleum Property Evaluation</a>	3.00
CHME390	<a href="#">Engineering and Strength of Materials</a>	3.00

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
CHME442	<a href="#">Corrosion</a>	3.00
PETE410	<a href="#">Independent Studies</a>	3.00
PETE424	<a href="#">Safety &amp; Environment Impact</a>	3.00
PETE443	<a href="#">Transport &amp; Storage of Petroleum</a>	3.00
PETE526	<a href="#">Separation &amp; Treatment Petrol Fluid</a>	3.00
PETE547	<a href="#">Applied Reservoir Simulation</a>	3.00
PETE557	<a href="#">Enhanced Oil Recovery</a>	3.00
PETE570	<a href="#">Special Topics in Petroleum Engineering</a>	3.00

# Department of Civil & Environmental Engineering

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## Bachelor of Science in Civil Engineering

Civil and Environmental Engineering is a broad field of engineering that deals with planning, design, construction and maintenance of structures, bridges and public works as they relate to earth, water and air, or civilization and their processes. Civil Engineering profession dominates every aspect of our life in one way or the other. The current economic prosperity in the UAE is based, to a great extent, on the excellent infrastructure and civic works developed by Civil Engineers. Civil Engineering is the oldest engineering discipline after Military Engineering. It deals with structures, bridges, construction management, highways, traffic, geotechnical, water supply and distribution networks, sewer and disaster mitigation. Environmental Engineering focuses on the quality and sustainability of the three main environmental elements; soil, water and air. The Department is keen to always provide the highest possible quality of higher education, scientific research, and community service. The Civil Engineering undergraduate program in the College of Engineering at the United Arab Emirates University is accredited by the Engineering Accreditation Commission of ABET. For more details on this program, [click here](#).

### Program Objectives

- Be committed to ethical standards, workplace safety measures and high level of awareness of social, economic, and environmental issues relevant to the civil engineering profession.
- Successfully deal with real life civil engineering problems and achieve practical and optimum solutions based on sound science and engineering knowledge.
- Efficiently design, manage, execute and/or evaluate a civil engineering system/component to satisfy client needs per design specifications and/or interdisciplinary requirements.
- Effectively use modern engineering tools and technical communications in different aspects of professional practices.
- Develop their knowledge, creativity and leadership and skills to cope with the rapidly evolving technologies.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- O1) An ability to apply knowledge of mathematics through differential equations, calculus-based physics, chemistry and biology [A].
- O2) An ability to apply knowledge in the technical areas of structural, transportation, water resources, environmental, geotechnical, surveying, construction engineering and management [A, B, C, E and K].
- O3) An ability to design and conduct civil engineering experiments, as well as to analyze and interpret data [B].

- O4) An ability to design structural, transportation, hydraulic, environmental, and geotechnical engineering systems, components, or processes to meet desired needs [C].
- O5) An ability to function within multi-disciplinary teams [D].
- O6) An ability to identify, formulate and solve civil engineering problems [E].
- O7) Understanding of and adhering to ethics, safety, professional responsibilities and the requirements for professional engineering registration [F].
- O8) An ability to communicate effectively in oral, written and visual forms [G].
- O9) Comprehend the impact of engineering projects on the society and the local and global environment [H].
- O10) A recognition of the need for, and an ability to engage in, life-long learning [I].
- O11) A knowledge of contemporary issues related to Civil Engineering [J].
- O12) An Ability to use advanced techniques, skills and modern engineering tools necessary for engineering practices [K].
- O13) A knowledge of basic concepts in management, business, public policy and leadership [D, F, G, H, J and K].

## Degree Requirements

**Required Credit Hours : minimum 147 hours**  
**General Education (Req. CH:42)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	<a href="#">Islamic Culture</a>	3.00

  

<b>Cluster 1: Values to Live By - Ethics (2.00 hours)</b>		<b>Credit Hours</b>
GENG215	<a href="#">Engineering Ethics</a> <sup>1</sup>	2.00
1 : Also counts towards the Major		

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU107	Introduction to Academic English For Engineering	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	<a href="#">Scientific Research Skills</a>	3.00
ITBP119	Algorithms and Problem Solving	3.00

PSY105	<a href="#">Creative &amp; Innovative Thinking Skills</a>	3.00
PHI180	<a href="#">Critical Thinking</a> <sup>2</sup>	3.00
2 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	<a href="#">Emirates Studies</a>	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	<a href="#">History and Theory of Architecture</a>	3.00
HIS133	<a href="#">Introduction to Art History</a>	3.00
HSR120	<a href="#">Introduction to Heritage &amp; Culture</a>	3.00
HSR130	<a href="#">Introduction to Language &amp; Communication</a>	3.00
LIT150	<a href="#">Introduction to Literature</a>	3.00
LNG100	<a href="#">Introduction to Linguistics</a>	3.00
LNG110	<a href="#">Language, Society &amp; Culture</a>	3.00
MSC200	<a href="#">Introduction to Mass Media</a>	3.00
MSC240	<a href="#">World and Arab Media</a>	3.00
PHI101	<a href="#">Introduction to Philosophy</a>	3.00
PHI270	<a href="#">Philosophy of Education</a>	3.00
PHI271	<a href="#">History and Philosophy of Science</a>	3.00
TRS200	<a href="#">Introduction to Translation</a>	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
GENG315	<a href="#">Engineering Economics</a> <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	<a href="#">Global Agri-food Trade</a>	3.00
ARCH346	<a href="#">Contemporary World Architecture</a>	3.00
BIOE240	<a href="#">Principles of Environmental Science</a>	3.00
GEO200	<a href="#">World Regional Geography</a>	3.00
HIS120	<a href="#">Arab &amp; Islamic Civilization</a>	3.00
HIS121	<a href="#">World History: Origins to 1500</a>	3.00
HIS125	<a href="#">Contemporary Civilization</a>	3.00

PSG250	<a href="#">Principles of International Relations</a>	3.00
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<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH1110	<a href="#">Calculus I for Engineering</a> <sup>4</sup>	3.00
4 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (7.00 hours)</b>		<b>Credit Hours</b>
CHEM111	<a href="#">General Chemistry I</a>	3.00
PHYS1110	<a href="#">Physics I for Engineering</a> <sup>5</sup>	4.00
5 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (6.00 hours)</b>		<b>Credit Hours</b>
CIVL585	<a href="#">Graduation Project I</a>	3.00
CIVL590	<a href="#">Graduation Project II</a> <sup>6</sup>	3.00
6 : Also counts towards the Major		

## College of Engineering

<b>Required Courses (26.00 hours)</b>		<b>Credit Hours</b>
CHEM175	<a href="#">Chemistry Lab I for Engineering</a>	1.00
GENG220	<a href="#">Engineering Thermodynamics</a>	3.00
MATH1120	<a href="#">Calculus II for Engineering</a>	3.00
MATH2210	<a href="#">Differential Equations for Engineering</a>	3.00
MATH2220	<a href="#">Linear Algebra for Engineering</a>	3.00
PHYS1120	<a href="#">Physics II for Engineering</a>	4.00
CHEM2706	<a href="#">Materials Science</a>	3.00
ELEC330	<a href="#">Computer Programming</a>	3.00
STAT210	<a href="#">Probability and Statistics</a>	3.00

## Civil Engineering

<b>Required Courses (70.00 hours)</b>		<b>Credit Hours</b>
BIOL250	<a href="#">Basic Microbiology</a>	3.00
CIVL240	<a href="#">Statics</a>	3.00
MECH305	<a href="#">Mechanics of Materials</a>	3.00
CIVL270	<a href="#">Introduction to Environmental Engineering</a>	2.00

CIVL310	<a href="#">Structural Analysis</a>	3.00
CIVL315	<a href="#">Computer Aided Drawing (CIVL)</a>	2.00
CIVL330	<a href="#">Transportation Engineering</a>	3.00
CIVL335	<a href="#">Surveying</a>	3.00
CIVL340	<a href="#">Soil Mechanics</a>	3.00
CIVL345	<a href="#">Fluid Mechanics Civil &amp; Architecture Engineers</a>	3.00
CIVL360	<a href="#">Concrete Technology</a>	3.00
CIVL365	<a href="#">Reinforced Concrete Design I</a>	3.00
CIVL375	<a href="#">Water &amp; Wastewater Technology</a>	3.00
CIVL400	<a href="#">Water Resources</a>	3.00
CIVL412	<a href="#">Reinforced Concrete Design II</a>	4.00
CIVL417	<a href="#">Structural Steel Design</a>	3.00
CIVL433	<a href="#">Highway Engineering</a>	3.00
CIVL442	<a href="#">Foundation Engineering</a>	2.00
CIVL445	<a href="#">Construction Management</a>	3.00
CIVL495	<a href="#">Industrial Training</a>	15.00

### Civil Engineering Specialization Tracks

**A student must complete 9 credit hours (3 courses) from any of the following 4 tracks. (9.00 hours)**

**Credit Hours**

#### **Geotechnical and Construction Management (9.00 hours)**

**Credit Hours**

CIVL540	<a href="#">Special Topics in Construction Management</a>	3.00
CIVL541	<a href="#">Special Topics in Soil Mechanics &amp; Foundation Engineering</a>	3.00
CIVL547	<a href="#">Advanced Construction Management</a>	3.00
CIVL548	<a href="#">Advanced Geotechnical Engineering</a>	3.00

#### **Structural Engineering (9.00 hours)**

**Credit Hours**

CIVL510	<a href="#">Special Topics in Structural Engineering</a>	3.00
CIVL515	<a href="#">Advanced Concrete Technology</a>	3.00
CIVL517	<a href="#">Matrix Structural Analysis</a>	3.00
CIVL552	<a href="#">Advanced Steel Design</a>	3.00

#### **Surveying and Transportation Engineering (9.00 hours)**

**Credit Hours**

CIVL530	<a href="#">Special Topics in Transportation Engineering</a>	3.00
CIVL531	<a href="#">Topographic Surveying</a>	3.00

CIVL534	<a href="#">Computer Aided Mapping</a>	3.00
CIVL538	<a href="#">Advanced Highway Engineering</a>	3.00
CIVL539	<a href="#">Traffic Engineering</a>	3.00

<b>Water Resources and Environmental Engineering (9.00 hours)</b>		<b>Credit Hours</b>
CIVL520	<a href="#">Special Topics in Water Resources &amp; Environmental Engineering</a>	3.00
CIVL522	<a href="#">Advanced Environmental Engineering</a>	3.00
CIVL524	<a href="#">Geo-environmental Engineering</a>	3.00
CIVL525	<a href="#">Hydrology</a>	3.00

# Department of Electrical Engineering

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## Bachelor of Science in Communication Engineering

The Communication Engineering program is dealing with the development and operation of communications technology including telecommunications. The Communication Engineering program is designed to provide students with a strong foundation in communication engineering through lectures and laboratory work. Graduates are prepared for responsible engineering positions in design, development, research, applications, and operation in the fields of communication and telecommunication. The curriculum is built around strong basic courses in mathematics, physics and engineering science. This is followed by a set of core courses covering the breadth of the program such as circuits, electronics, electromagnetics, digital logic, signals and systems, control, microprocessors, and fundamentals of communication systems. The Communication Engineering undergraduate program in the College of Engineering at the United Arab Emirates University is accredited by the Engineering Accreditation Commission of ABET. For more details on this program, [click here](#).

### Program Objectives

- PEO-1: Have distinguished careers in communication engineering and related fields and perform leadership roles to serve the industry and the community.
- PEO-2: Achieve industry goals related to communication engineering by using innovative ideas and adopting emerging technologies.
- PEO-3: Incorporate teamwork, communication, and interpersonal skills to be productive in multidisciplinary environments with awareness of ethical and social responsibilities.
- PEO-4: Continue to develop their knowledge and skills through, graduate studies, continuing education, and training.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Ability to apply knowledge of mathematics, statistics, science and engineering principles. The mathematics knowledge includes linear algebra, vector algebra, partial differential equations, complex analysis, probability, and random processes.
- Ability to design and conduct experiments safely, as well as to analyze and interpret data.
- Ability to design electrical and communication components, systems or processes to meet desired specifications and imposed constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- Ability to work in teams including multidisciplinary teams.
- Ability to identify, formulate and solve problems encountered in the practice of electrical and communication engineering.
- Understanding of professional and ethical responsibility.

- Ability to communicate effectively orally and in writing.
- Ability to understand the impact of engineering solutions in a global and societal context.
- Recognition of the need for, and an ability to engage in life-long learning.
- Knowledge of contemporary issues.
- Ability to use the techniques, skills, and modern engineering tools necessary for electrical and communication engineering practice.

## Degree Requirements

**Required Credit Hours : minimum 147 hours**

**General Education (Req. CH:42)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	<u>Islamic Culture</u>	3.00

  

<b>Cluster 1: Values to Live By - Ethics (2.00 hours)</b>		<b>Credit Hours</b>
GENG215	<u>Engineering Ethics</u> <sup>1</sup>	2.00
1 : Also counts towards the Major		

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU107	Introduction to Academic English For Engineering	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	<u>Scientific Research Skills</u>	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	<u>Creative &amp; Innovative Thinking Skills</u>	3.00
PHI180	<u>Critical Thinking</u> <sup>2</sup>	3.00
2 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	<u>Emirates Studies</u>	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	<a href="#"><u>History and Theory of Architecture</u></a>	3.00
HIS133	<a href="#"><u>Introduction to Art History</u></a>	3.00
HSR120	<a href="#"><u>Introduction to Heritage &amp; Culture</u></a>	3.00
HSR130	<a href="#"><u>Introduction to Language &amp; Communication</u></a>	3.00
LIT150	<a href="#"><u>Introduction to Literature</u></a>	3.00
LNG100	<a href="#"><u>Introduction to Linguistics</u></a>	3.00
LNG110	<a href="#"><u>Language, Society &amp; Culture</u></a>	3.00
MSC200	<a href="#"><u>Introduction to Mass Media</u></a>	3.00
MSC240	<a href="#"><u>World and Arab Media</u></a>	3.00
PHI101	<a href="#"><u>Introduction to Philosophy</u></a>	3.00
PHI270	<a href="#"><u>Philosophy of Education</u></a>	3.00
PHI271	<a href="#"><u>History and Philosophy of Science</u></a>	3.00
TRS200	<a href="#"><u>Introduction to Translation</u></a>	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
GENG315	<a href="#"><u>Engineering Economics</u></a> <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	<a href="#"><u>Global Agri-food Trade</u></a>	3.00
ARCH346	<a href="#"><u>Contemporary World Architecture</u></a>	3.00
BIOE240	<a href="#"><u>Principles of Environmental Science</u></a>	3.00
GEO200	<a href="#"><u>World Regional Geography</u></a>	3.00
HIS120	<a href="#"><u>Arab &amp; Islamic Civilization</u></a>	3.00
HIS121	<a href="#"><u>World History: Origins to 1500</u></a>	3.00
HIS125	<a href="#"><u>Contemporary Civilization</u></a>	3.00
PSG250	<a href="#"><u>Principles of International Relations</u></a>	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH1110	<a href="#"><u>Calculus I for Engineering</u></a> <sup>4</sup>	3.00
4 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (7.00 hours)</b>		<b>Credit Hours</b>
CHEM111	<a href="#">General Chemistry I</a>	3.00
PHYS1110	<a href="#">Physics I for Engineering</a> <sup>5</sup>	4.00
5 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (6.00 hours)</b>		<b>Credit Hours</b>
ELEC585	<a href="#">Graduation Project I</a>	3.00
ELEC590	<a href="#">Graduation Project II</a> <sup>6</sup>	3.00
6 : Also counts towards the Major		

### College of Engineering

<b>Required Courses (23.00 hours)</b>		<b>Credit Hours</b>
CHEM175	<a href="#">Chemistry Lab I for Engineering</a>	1.00
GENG220	<a href="#">Engineering Thermodynamics</a>	3.00
MATH1120	<a href="#">Calculus II for Engineering</a>	3.00
MATH2210	<a href="#">Differential Equations for Engineering</a>	3.00
MATH2220	<a href="#">Linear Algebra for Engineering</a>	3.00
CHEM2706	<a href="#">Materials Science</a>	3.00
PHYS1120	<a href="#">Physics II for Engineering</a>	4.00
STAT210	<a href="#">Probability and Statistics</a>	3.00

### Communication Engineering

<b>Required Courses (67.00 hours)</b>		<b>Credit Hours</b>
ECOM320	<a href="#">Random Signals</a>	3.00
ECOM402	<a href="#">Communication Systems Lab</a>	1.00
ECOM360	<a href="#">Fundamentals of Communication Systems</a>	3.00
ECOM412	<a href="#">Electromagnetic Waves</a>	3.00
ECOM422	<a href="#">Digital Communication Systems</a>	3.00
ECOM432	<a href="#">Data Communications &amp; Networks</a>	3.00
ECOM442	<a href="#">Data Communications &amp; Networks Lab</a>	1.00
ECOM451	<a href="#">Digital Signal Processing</a>	3.00
ECOM461	<a href="#">Digital Signal Processing Lab</a>	1.00
ELEC305	<a href="#">Electric Circuits I</a>	3.00
ELEC310	<a href="#">Electric Circuits I lab</a>	1.00

ELEC315	<a href="#">Fundamentals of Microelec Devices</a>	3.00
ELEC325	<a href="#">Engineering Electromagnetics</a>	3.00
ELEC330	<a href="#">Computer Programming</a>	3.00
ELEC335	<a href="#">Digital Logic Design</a>	3.00
ELEC345	<a href="#">Digital Logic Design Lab</a>	1.00
ELEC360	<a href="#">Signals &amp; Systems</a>	3.00
ELEC370	<a href="#">Electronic Circuits</a>	3.00
ELEC375	<a href="#">Electronic Circuits Lab</a>	1.00
ELEC431	<a href="#">Control Systems</a>	3.00
ELEC451	<a href="#">Microprocessors</a>	3.00
ELEC461	<a href="#">Microprocessors Lab</a>	1.00
ELEC495	<a href="#">Industrial Training</a>	15.00

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
ECOM531	<a href="#">Microwave Engineering</a>	3.00
ECOM532	<a href="#">Antenna Engineering</a>	3.00
ECOM542	<a href="#">Wireless Communications</a>	3.00
ECOM551	<a href="#">Introduction to Secure Communications Systems</a>	3.00
ECOM552	<a href="#">Telecommunication Network Management</a>	3.00
ECOM561	<a href="#">Information Theory &amp; Coding</a>	3.00
ECOM562	<a href="#">Satellite Communications Systems</a>	3.00
ECOM571	<a href="#">Communication Circuits</a>	3.00
ECOM580	<a href="#">Special Topics in Communications</a>	3.00

### Math and Science Elective

<b>Student should take one course from this group (3.00 hours)</b>		<b>Credit Hours</b>
PHYS235	<a href="#">Waves and Optics</a>	3.00
PHYS330	<a href="#">Computational Physics</a>	3.00
MATH205	<a href="#">Set Theory and Logic</a>	3.00
MATH470	<a href="#">Mathematical Modeling</a>	3.00

# Bachelor of Science in Electrical Engineering

The Electrical Engineering program is designed to provide students with a strong foundation in Electrical Engineering through lectures and laboratory work. Graduates are prepared for responsible engineering positions in design, development, research, applications, and operation in all fields related to Electrical Engineering. The curriculum is built around strong basic courses in mathematics, physics and engineering science. This is followed by a set of core courses covering the breadth of the program, such as circuits, electronics, electromagnetics, digital logic, signals and systems, control, microprocessors, electric energy conversion, power systems, and computer programming. The Electrical Engineering undergraduate program in the College of Engineering at the United Arab Emirates University is accredited by the Engineering Accreditation Commission of ABET. For more details on this program, [click here](#).

## Program Objectives

- PEO-1: Have distinguished careers in electrical engineering and related fields and perform leadership roles to serve the industry and the community.
- PEO-2: Achieve industry goals related to electrical engineering by using innovative ideas and adopting emerging technologies.
- PEO-3: Incorporate teamwork, communication, and interpersonal skills to be productive in multidisciplinary environments with awareness of ethical and social responsibilities.
- PEO-4: Continue to develop their knowledge and skills through, graduate studies, continuing education, and training.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Ability to apply knowledge of mathematics, statistics, science and engineering principles. The mathematics knowledge includes linear algebra, vector algebra, partial differential equations, complex analysis, and probability.
- Ability to design and conduct experiments safely, as well as to analyze and interpret data.
- Ability to design electrical components, systems or processes to meet desired specifications and imposed constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- Ability to work in teams including multidisciplinary teams.
- Ability to identify, formulate and solve problems encountered in the practice of electrical engineering.
- Understanding of professional and ethical responsibility.
- Ability to communicate effectively orally and in writing.
- Ability to understand the impact of engineering solutions in a global and societal context.
- Recognition of the need for, and an ability to engage in life-long learning.

- Knowledge of contemporary issues.
- Ability to use the techniques, skills, and modern engineering tools necessary for electrical engineering practice.

## Degree Requirements

Required Credit Hours : minimum 147 hours

General Education (Req. CH:42)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	<a href="#">Islamic Culture</a>	3.00

<b>Cluster 1: Values to Live By - Ethics (2.00 hours)</b>		<b>Credit Hours</b>
GENG215	<a href="#">Engineering Ethics</a> <sup>1</sup>	2.00
1 : Also counts towards the Major		

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU107	Introduction to Academic English For Engineering	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	<a href="#">Scientific Research Skills</a>	3.00
PHI180	<a href="#">Critical Thinking</a> <sup>2</sup>	3.00
PSY105	<a href="#">Creative &amp; Innovative Thinking Skills</a>	3.00
ITBP119	Algorithms and Problem Solving	3.00
2 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	<a href="#">Emirates Studies</a>	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH346	<a href="#">Contemporary World Architecture</a>	3.00
HIS133	<a href="#">Introduction to Art History</a>	3.00
HSR120	<a href="#">Introduction to Heritage &amp; Culture</a>	3.00

HSR130	<a href="#">Introduction to Language &amp; Communication</a>	3.00
LIT150	<a href="#">Introduction to Literature</a>	3.00
LNG100	<a href="#">Introduction to Linguistics</a>	3.00
LNG110	<a href="#">Language, Society &amp; Culture</a>	3.00
MSC200	<a href="#">Introduction to Mass Media</a>	3.00
MSC240	<a href="#">World and Arab Media</a>	3.00
PHI101	<a href="#">Introduction to Philosophy</a>	3.00
PHI270	<a href="#">Philosophy of Education</a>	3.00
PHI271	<a href="#">History and Philosophy of Science</a>	3.00
TRS200	<a href="#">Introduction to Translation</a>	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

GENG315	<a href="#">Engineering Economics</a> <sup>3</sup>	3.00
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3 : Also counts towards the Major

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

AGRB360	<a href="#">Global Agri-food Trade</a>	3.00
ARCH346	<a href="#">Contemporary World Architecture</a>	3.00
BIOE240	<a href="#">Principles of Environmental Science</a>	3.00
GEO200	<a href="#">World Regional Geography</a>	3.00
HIS120	<a href="#">Arab &amp; Islamic Civilization</a>	3.00
HIS121	<a href="#">World History: Origins to 1500</a>	3.00
HIS125	<a href="#">Contemporary Civilization</a>	3.00
PSG250	<a href="#">Principles of International Relations</a>	3.00

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

MATH1110	<a href="#">Calculus I for Engineering</a> <sup>4</sup>	3.00
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4 : Also counts towards the Major

### Cluster 4: The Natural World - Natural Sciences (7.00 hours)

Credit Hours

CHEM111	<a href="#">General Chemistry I</a>	3.00
PHYS1110	<a href="#">Physics I for Engineering</a> <sup>5</sup>	4.00

5 : Also counts towards the Major

<b>Cluster 5: Capstone Experience (6.00 hours)</b>		<b>Credit Hours</b>
ELEC585	<a href="#"><u>Graduation Project I</u></a>	3.00
ELEC590	<a href="#"><u>Graduation Project II</u></a> <sup>6</sup>	3.00
6 : Also counts towards the Major		

## College of Engineering

<b>Required Courses (23.00 hours)</b>		<b>Credit Hours</b>
CHEM175	<a href="#"><u>Chemistry Lab I for Engineering</u></a>	1.00
GENG220	<a href="#"><u>Engineering Thermodynamics</u></a>	3.00
MATH1120	<a href="#"><u>Calculus II for Engineering</u></a>	3.00
MATH2210	<a href="#"><u>Differential Equations for Engineering</u></a>	3.00
MATH2220	<a href="#"><u>Linear Algebra for Engineering</u></a>	3.00
CHEM2706	<a href="#"><u>Materials Science</u></a>	3.00
PHYS1120	<a href="#"><u>Physics II for Engineering</u></a>	4.00
STAT210	<a href="#"><u>Probability and Statistics</u></a>	3.00

## Electrical Engineering

<b>Required Courses (67.00 hours)</b>		<b>Credit Hours</b>
ECOM360	<a href="#"><u>Fundamentals of Communication Systems</u></a>	3.00
ECOM432	<a href="#"><u>Data Communications &amp; Networks</u></a>	3.00
ECOM442	<a href="#"><u>Data Communications &amp; Networks Lab</u></a>	1.00
ELEC305	<a href="#"><u>Electric Circuits I</u></a>	3.00
ELEC310	<a href="#"><u>Electric Circuits I lab</u></a>	1.00
ELEC315	<a href="#"><u>Fundamentals of Microelec Devices</u></a>	3.00
ELEC320	<a href="#"><u>Electric Circuits II</u></a>	3.00
ELEC325	<a href="#"><u>Engineering Electromagnetics</u></a>	3.00
ELEC330	<a href="#"><u>Computer Programming</u></a>	3.00
ELEC335	<a href="#"><u>Digital Logic Design</u></a>	3.00
ELEC345	<a href="#"><u>Digital Logic Design Lab</u></a>	1.00
ELEC360	<a href="#"><u>Signals &amp; Systems</u></a>	3.00
ELEC370	<a href="#"><u>Electronic Circuits</u></a>	3.00
ELEC375	<a href="#"><u>Electronic Circuits Lab</u></a>	1.00
ELEC411	<a href="#"><u>Electric Energy Conversion</u></a>	3.00
ELEC431	<a href="#"><u>Control Systems</u></a>	3.00
ELEC433	<a href="#"><u>Instrument &amp; Control Lab</u></a>	1.00

ELEC451	<a href="#">Microprocessors</a>	3.00
ELEC461	<a href="#">Microprocessors Lab</a>	1.00
ELEC462	<a href="#">Computer Architecture &amp; Organization</a>	3.00
ELEC472	<a href="#">Power Systems</a>	3.00
ELEC481	<a href="#">Electric Energy Conversion Lab</a>	1.00
ELEC495	<a href="#">Industrial Training</a>	15.00

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
ECOM451	<a href="#">Digital Signal Processing</a>	3.00
ELEC512	<a href="#">Digital Electronics</a>	3.00
ELEC521	<a href="#">Advanced Control Systems</a>	3.00
ELEC522	<a href="#">Industrial Automation</a>	3.00
ELEC530	<a href="#">Special Topics in Power &amp; Control Engineering</a>	3.00
ELEC531	<a href="#">Power Systems Analysis</a>	3.00
ELEC533	<a href="#">Very Large Scale Integrated Circuits (VLSI)</a>	3.00
ELEC534	<a href="#">Power System Distribution</a>	3.00
ELEC551	<a href="#">Digital Image Processing</a>	3.00
ELEC552	<a href="#">Computer Networks</a>	3.00
ELEC561	<a href="#">Java Programming Applications</a>	3.00
ELEC562	<a href="#">Embedded System Design</a>	3.00
ELEC570	<a href="#">Special Topics Computer Engineering</a>	3.00
ELEC580	<a href="#">Special Topics in Electronic Engineering</a>	3.00
ELEC582	<a href="#">Analog Integrated Circuit Design</a>	3.00
ELEC592	<a href="#">Power Electronics</a>	3.00

### Math and Science Electives

<b>Student should take one course from this group (3.00 hours)</b>		<b>Credit Hours</b>
PHYS235	<a href="#">Waves and Optics</a>	3.00
PHYS330	<a href="#">Computational Physics</a>	3.00
MATH205	<a href="#">Set Theory and Logic</a>	3.00
MATH470	<a href="#">Mathematical Modeling</a>	3.00

# Department of Mechanical Engineering

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## Bachelor of Science in Mechanical Engineering

Mechanical engineering is one of the broadest and oldest branches of engineering and can require work that ranges from the design and manufacture of very fine and sensitive instruments with micro and nano scales, to the design and fabrication of huge power plants. The ME program emphasizes a fundamental approach to engineering in which the student learns to identify needs, define problems and apply basic principles and techniques to obtain a solution. This philosophy is incorporated in the classroom lectures, laboratory activities, design projects and research. ME graduates are expected to deal with moving devices and complex systems. Students learn about materials, design, manufacturing, solid and fluid mechanics, thermodynamics, heat transfer, control, and instrumentation, to understand mechanical systems. Specialized ME subjects include energy conversion, energy management, air conditioning, turbomachinery, composite materials and materials processing, combustion, fracture mechanics, selected topics in mechatronics and vibration, control engineering, introduction to robotics, selected topics in manufacturing and design, maintenance engineering, biomechanics and selected topics in bioengineering. The Mechanical Engineering undergraduate program in the College of Engineering at the United Arab Emirates University is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>. For more details on this program, [click here](#).

### Program Objectives

- Our graduates will be creative and self-motivated engineers, able to mentor others and to achieve advancements in their areas.
- Our graduates will be qualified to achieve the goals of industry which will be recognized through the periodic promotions, leadership, reputation and additional responsibilities.
- Our graduates will be expected to disseminate and implement codes of ethics and professional practice guidelines in resolving ethical dilemmas in their workplace.
- Our graduates will possess the entrepreneurial abilities that qualify them to lead diverse and healthy economy and create a culture of innovation in their workplace.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- an ability to apply knowledge of mathematics, science, and engineering sciences.
- an ability to design and conduct experiments, as well as to analyze and interpret data
- an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- an ability to function on multidisciplinary teams.
- an ability to identify, formulate, and solve engineering problems.
- an understanding of professional and ethical responsibility.

- an ability to communicate effectively.
- the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- a recognition of the need for, and an ability to engage in life-long learning.
- a knowledge of contemporary issues.
- an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice. Use the techniques, skills, and modern engineering tools necessary for engineering practice.
- a recognition of the need for and an ability to engage in entrepreneurial activities.

## Degree Requirements

**Required Credit Hours : minimum 147 hours**  
**General Education (Req. CH:42)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	<a href="#">Islamic Culture</a>	3.00

<b>Cluster 1: Values to Live By - Ethics (2.00 hours)</b>		<b>Credit Hours</b>
GENG215	<a href="#">Engineering Ethics</a> <sup>1</sup>	2.00
<i>1 : Also counts towards the Major</i>		

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU107	Introduction to Academic English For Engineering	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	<a href="#">Scientific Research Skills</a>	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	<a href="#">Critical Thinking</a> <sup>2</sup>	3.00
PSY105	<a href="#">Creative &amp; Innovative Thinking Skills</a>	3.00
<i>2 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours</i>		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	<a href="#">Emirates Studies</a>	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	<a href="#">History and Theory of Architecture</a>	3.00
HIS133	<a href="#">Introduction to Art History</a>	3.00
HSR120	<a href="#">Introduction to Heritage &amp; Culture</a>	3.00
HSR130	<a href="#">Introduction to Language &amp; Communication</a>	3.00
LIT150	<a href="#">Introduction to Literature</a>	3.00
LNG100	<a href="#">Introduction to Linguistics</a>	3.00
LNG110	<a href="#">Language, Society &amp; Culture</a>	3.00
MSC200	<a href="#">Introduction to Mass Media</a>	3.00
MSC240	<a href="#">World and Arab Media</a>	3.00
PHI101	<a href="#">Introduction to Philosophy</a>	3.00
PHI270	<a href="#">Philosophy of Education</a>	3.00
PHI271	<a href="#">History and Philosophy of Science</a>	3.00
TRS200	<a href="#">Introduction to Translation</a>	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
GENG315	<a href="#">Engineering Economics</a> <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	<a href="#">Global Agri-food Trade</a>	3.00
ARCH346	<a href="#">Contemporary World Architecture</a>	3.00
BIOE240	<a href="#">Principles of Environmental Science</a>	3.00
GEO200	<a href="#">World Regional Geography</a>	3.00
HIS120	<a href="#">Arab &amp; Islamic Civilization</a>	3.00
HIS121	<a href="#">World History: Origins to 1500</a>	3.00
HIS125	<a href="#">Contemporary Civilization</a>	3.00
PSG250	<a href="#">Principles of International Relations</a>	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH1110	<a href="#">Calculus I for Engineering</a> <sup>4</sup>	3.00
4 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (7.00 hours)</b>		<b>Credit Hours</b>
CHEM111	<a href="#">General Chemistry I</a>	3.00
PHYS1110	<a href="#">Physics I for Engineering</a> <sup>5</sup>	4.00
5 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (6.00 hours)</b>		<b>Credit Hours</b>
MECH585	<a href="#">Graduation Project I</a>	3.00
MECH590	<a href="#">Graduation Project II</a> <sup>6</sup>	3.00
6 : Also counts towards the Major		

### College of Engineering

<b>Required Courses (26.00 hours)</b>		<b>Credit Hours</b>
CHEM175	<a href="#">Chemistry Lab I for Engineering</a>	1.00
GENG220	<a href="#">Engineering Thermodynamics</a>	3.00
MATH1120	<a href="#">Calculus II for Engineering</a>	3.00
MATH2210	<a href="#">Differential Equations for Engineering</a>	3.00
MATH2220	<a href="#">Linear Algebra for Engineering</a>	3.00
MECH390	<a href="#">Engineering Materials</a>	3.00
PHYS1120	<a href="#">Physics II for Engineering</a>	4.00
ELEC330	<a href="#">Computer Programming</a>	3.00
STAT210	<a href="#">Probability and Statistics</a>	3.00

### Mechanical Engineering

<b>Required Courses (67.00 hours)</b>		<b>Credit Hours</b>
ELEC372	<a href="#">Electro-Mechanical Devices</a>	2.00
CIVL240	<a href="#">Statics</a>	3.00
MECH305	<a href="#">Mechanics of Materials</a>	3.00
MECH306	<a href="#">Manufacturing Processes</a>	3.00
MECH310	<a href="#">Dynamics</a>	3.00
MECH311	<a href="#">Applied Thermodynamics</a>	3.00
MECH315	<a href="#">Geometric Modeling</a>	2.00
MECH340	<a href="#">Fluid Mechanics</a>	3.00
MECH348	<a href="#">Fluid Mechanics Lab</a>	1.00
MECH350	<a href="#">Introduction to Mechatronics</a>	3.00
MECH384	<a href="#">Mathematics for Mech. Eng.</a>	3.00

MECH433	<a href="#">Introduction to Computer Aided Manufacturing</a>	2.00
MECH407	<a href="#">Machine Design I</a>	3.00
MECH409	<a href="#">Dynamic Systems &amp; Control</a>	3.00
MECH411	<a href="#">Heat Transfer</a>	3.00
MECH412	<a href="#">Machine Design II</a>	3.00
MECH417	<a href="#">Kinematics Design of Machinery</a>	3.00
MECH426	<a href="#">Thermofluid System Design &amp; Analysis</a>	3.00
MECH430	<a href="#">Thermal Engineering Lab</a>	1.00
MECH440	<a href="#">Design and Manufacturing Lab</a>	1.00
MECH450	<a href="#">System Dynamics Lab</a>	1.00
MECH495	<a href="#">Industrial Training</a>	15.00

### Basic Sciences Electives

<b>Student should take one course from this group (3.00 hours)</b>		<b>Credit Hours</b>
PHYS235	<a href="#">Waves and Optics</a>	3.00
PHYS250	<a href="#">Modern Physics</a>	3.00
CHEM282	<a href="#">Organic Chemistry for Non-Majors</a>	3.00
BIOC100	<a href="#">Basic Biology I</a>	3.00

### Elective Mechanical Engineering Specialization Requirements

<b>A student must successfully complete 9 credit hours (3 courses) from any of the following 4 groups. (9.00 hours)</b>	<b>Credit Hours</b>
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<b>Bioengineering (9.00 hours)</b>	<b>Credit Hours</b>	
MECH520	<a href="#">Selected Topics in Bioengineering</a>	3.00
MECH521	<a href="#">Biomechanics</a>	3.00
MECH522	<a href="#">Bioinstrumentation</a>	3.00
MECH523	<a href="#">Biomaterials</a>	3.00
MECH525	<a href="#">Introduction to Bioengineering</a>	3.00

<b>Design and Manufacturing (9.00 hours)</b>	<b>Credit Hours</b>	
MECH540	<a href="#">Selected Topics in Design &amp; Manufacturing</a>	3.00
MECH541	<a href="#">Non-conventional Manufacturing</a>	3.00
MECH542	<a href="#">Introduction to Composites Design &amp; Manufacturing</a>	3.00

MECH543	<a href="#">Introduction to Rapid Tooling</a>	3.00
MECH545	<a href="#">Maintenance Engineering</a>	3.00
MECH547	<a href="#">Intermediate Mechanics of Material</a>	3.00

<b>Thermo-Fluids (9.00 hours)</b>		<b>Credit Hours</b>
MECH510	<a href="#">Selected Topics in Thermal Sciences</a>	3.00
MECH512	<a href="#">Intermediate Heat Transfer</a>	3.00
MECH513	<a href="#">Air Conditioning Systems</a>	3.00
MECH514	<a href="#">Heat Engines</a>	3.00
MECH516	<a href="#">Energy Management</a>	3.00
MECH517	<a href="#">Turbomachinery</a>	3.00

<b>Mechatronics and Control (9.00 hours)</b>		<b>Credit Hours</b>
MECH506	<a href="#">Control Engineering</a>	3.00
MECH530	<a href="#">Selected Topics in Mechatronics</a>	3.00
MECH531	<a href="#">Introduction to Robotics</a>	3.00
MECH532	<a href="#">Design of Mechatronics Systems</a>	3.00
MECH533	<a href="#">Mechanical Vibration</a>	3.00

<b>Aerospace (Student not allowed to take more than two courses from this group) (9.00 hours)</b>		<b>Credit Hours</b>
MECH550	<a href="#">Introduction to Aerospace Engineering</a>	3.00
MECH551	<a href="#">Foundations of Aerodynamics</a>	3.00
MECH552	<a href="#">Aircraft Structures</a>	3.00
MECH553	<a href="#">Flight Dynamics, Stability and Control</a>	3.00
MECH554	<a href="#">Aerospace Propulsion</a>	3.00

## Minor in Mechatronics Engineering

The objective of this minor is to provide the student an introduction to Mechatronics Engineering with emphasis on solutions to engineering problems. The minor provides a foundation in computer design, embedded systems, dynamics, control systems, vibrations, automation, and the design of Mechatronics systems.

### Program Objectives

- Augment the Electrical/Mechanical engineering student's ability with in depth knowledge in Mechatronics
- Contribute to the UAE regional economic development

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Developed an understanding of the operation and design of Mechatronics systems
- Gained skills in solving engineering kinematics, kinetics and vibration problems
- Gained programming skills and an understanding of logic, electronics and automation

### Degree Requirements

**Required Credit Hours : minimum 18 hours**

**Minor in Mechatronics Engineering for Electrical Engineering (EE) Major (Req. CH:18)**

<b>Required courses for EE Major (6.00 hours)</b>		<b>Credit Hours</b>
ELEC431	Control Systems	3.00
MECH310	Dynamics	3.00

<b>Elective Courses for EE Major (Choose any two of the following EE Courses:) (6.00 hours)</b>		<b>Credit Hours</b>
ELEC521	Advanced Control Systems	3.00
ELEC522	Industrial Automation	3.00
ELEC562	Embedded System Design	3.00

<b>Elective Courses for EE Major (Choose any two of the following ME Courses:) (6.00 hours)</b>		<b>Credit Hours</b>
MECH530	Selected Topics in Mechatronics	3.00
MECH532	Design of Mechatronics Systems	3.00
MECH533	Mechanical Vibration	3.00

**Minor in Mechatronics Engineering for Mechanical Engineering (ME) Major (CH:18)**

<b>Required courses for ME Major (6.00 hours)</b>		<b>Credit Hours</b>
MECH350	Introduction to Mechatronics	3.00
ELEC335	Digital Logic Design	3.00

<b>Elective Courses for ME Major (Choose any two of the following ME courses:) (6.00 hours)</b>		<b>Credit Hours</b>
MECH530	Selected Topics in Mechatronics	3.00
MECH531	Introduction to Robotics	3.00
MECH532	Design of Mechatronics Systems	3.00

<b>Elective Courses for ME Major (Choose any two of the following EE courses:) (6.00 hours)</b>		<b>Credit Hours</b>
ELEC370	Electronic Circuits	3.00
ELEC522	Industrial Automation	3.00
ELEC562	Embedded System Design	3.00

## **Minor in Aerospace Engineering**

Aerospace Engineering is considered to be a natural extension of Mechanical Engineering and pursuing the minor in this area will hence give the chance to ME students to have some good knowledge in this vital area that will enable them to effectively engage in Aerospace Engineering industry both in UAE and abroad. The Aerospace industry is booming in UAE in general and in Al Ain in specific. This is why it becomes necessary to have qualified national graduates in Mechanical Engineering who are equipped with good foundations in Aerospace Engineering. Evidence on this is the interest shown recently by one of the main industrial companies in the area of Aerospace Engineering in UAE, namely Mubadala/Strata, where they approached UAE University and showed interest and willingness to support a minor program in Aerospace Engineering at the Mechanical Engineering Department.

### **Program Objectives**

- To develop engineers who are broad-based in aerospace technical knowledge and aerospace engineering applications.
- To produce graduates who are able to solve problems and/or design products and services which are of importance to the aerospace industry in UAE.
- To produce graduates who have specific technical skills and soft skills (communication skills, collaboration skills, problem solving skills, and work ethic) necessary to the aerospace industry.

### **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- To apply knowledge of mathematics, calculus based sciences and engineering to aerospace engineering.
- To design aerospace engineering related thermal and mechanical systems, component or processes to meet desired needs.
- To identify, formulate and solve aerospace engineering problems.
- To use modern engineering techniques, skills and computing tools necessary for aerospace engineering practice.

## Degree Requirements

Required Credit Hours : minimum 18 hours  
Aerospace Engineering

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
MECH550	Introduction to Aerospace Engineering	3.00
MECH551	Foundations of Aerodynamics	3.00
MECH552	Aircraft Structures	3.00
MECH553	Flight Dynamics, Stability and Control	3.00
MECH554	Aerospace Propulsion	3.00

**Elective Courses (Student should select one course from the following groups)**

<b>Group-1 (3.00 hours)</b>		<b>Credit Hours</b>
MECH540	Selected Topics in Design & Manufacturing	3.00
MECH541	Non-conventional Manufacturing	3.00
MECH542	Introduction to Composites Design & Manufacturing	3.00
MECH543	Introduction to Rapid Tooling	3.00
MECH545	Maintenance Engineering	3.00
MECH547	Intermediate Mechanics of Material	3.00

<b>Group-2 (3.00 hours)</b>		<b>Credit Hours</b>
MECH510	Selected Topics in Thermal Sciences	3.00
MECH512	Intermediate Heat Transfer	3.00
MECH513	Air Conditioning Systems	3.00
MECH516	Energy Management	3.00
MECH517	Turbomachinery	3.00

<b>Group-3 (3.00 hours)</b>		<b>Credit Hours</b>
MECH506	Control Engineering	3.00
MECH530	Selected Topics in Mechatronics	3.00
MECH531	Introduction to Robotics	3.00
MECH532	Design of Mechatronics Systems	3.00
MECH533	Mechanical Vibration	3.00

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## College of Food and Agriculture

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### Department of Agribusiness and Consumer Science

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## Bachelor of Science in Agribusiness

The Bachelor's Degree program in Agribusiness emphasizes the application of both business and economic principles to the issues confronting agribusiness firms. Students will have an opportunity to pursue a rigorous program of study in both agricultural sciences and business courses leading to a wide range of employment opportunities within agricultural related enterprises. The students are provided skills to examine domestic and global consumer interests and their impact on demand for food and agriculture products. Students will gain a basic foundation in business, marketing, finance, and accounting. They will specialize in marketing intelligence for agribusiness by supplementing coursework with market research that applies quantitative and qualitative research methods. Students will learn economic principles and strategies for both marketing and management of agribusiness by examining the efficient allocation of the country's scarce resources and profit maximization for producers.

### Program Objectives

- Provide students with important and new knowledge required for careers in agribusiness.
- Prepare students for work in fields related to agribusiness or for advanced studies.
- Develop students' professional skills needed for careers in agribusiness.
- Develop students' general skills and desired attitudes.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop knowledge and skills in the agribusiness sector.
- Communicate effectively in written and oral forms with diverse audiences.
- Apply economic theories, quantitative techniques, and research methods required for careers in agribusiness.
- Utilize business management tools in public and private sectors, as well as domestic and global settings.
- Demonstrate skills related to leadership and team work in agribusiness.
- Evaluate problems in agribusiness critically and ethically, and offer viable solutions, including business project feasibility studies, marketing and business plans.
- Analyze UAE, regional, and international agricultural trade and food sectors.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU106	Introduction to Academic English For Food & Agriculture	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00

LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

AGRB210	Introduction to Agribusiness <sup>2</sup>	3.00
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<sup>2</sup> : Also counts towards the Major

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

AGRB360	Global Agri-food Trade <sup>3</sup>	3.00
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<sup>3</sup> : Also counts towards the Major

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

MATH105	Calculus I <sup>4</sup>	3.00
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<sup>4</sup> : Also counts towards the Major

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

BIOC100	Basic Biology I	3.00
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PHYS105	General Physics I <sup>5</sup>	3.00
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<sup>5</sup> : Also counts towards the Major

### Cluster 5: Capstone Experience (4.00 hours)

Credit Hours

AGRB480	Senior Project <sup>6</sup>	4.00
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<sup>6</sup> : Also counts towards the Major

## Agribusiness

<b>Required Courses (53.00 hours)</b>		<b>Credit Hours</b>
ACCT100	Principles of Financial Accounting	3.00
ACCT225	Fundamental of Cost & Management Accounting	3.00
AGRB200	Agricultural Economics	3.00
AGRB300	Marketing Management for Agribusiness	3.00
AGRB312	Logistics in Global Agriculture	3.00
AGRB352	Agribusiness Management & Entrepreneurship	3.00
AGRB391	Applications Of Quantitative Research Techniques to Social Sciences	3.00
AGRB410	Internship	3.00
AGRB421	Agribusiness Strategy	3.00
AGRB422	International Agribusiness Policy	3.00
AGRB432	Agribusiness Marketing Plans	3.00
AGRB450	Agribusiness Senior Seminar	2.00
ECON125	Principles of Macroeconomics	3.00
FINC240	Principles of Financial Management	3.00
FINC377	Investment	3.00
HRMD320	Human Resources Management	3.00
MKTG310	Marketing Research	3.00
STAT130	Statistics for Business	3.00

<b>Elective Courses (21.00 hours)</b>		<b>Credit Hours</b>
AGRB341	E-Commerce & Agri-food Industries	3.00
AGRB371	Linear Programming for Agribusiness	3.00
AGRB374	Fundamentals of Production Economic	3.00
AGRB377	Principles of Economic Development	3.00
AGRB392	Introduction to Resource & Environmental Economics	3.00
AGRB401	Evaluation of Agribusiness Projects	3.00
ARAG220	Natural Resources	3.00
ARAG240	Contemporary Agricultural Science	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
MIST200	Foundation of MIS & Technologies	3.00
MSC243	Public Relations & Advertising Principles	3.00
SOC304	Demography	3.00

<b>Free Electives (6.00 hours)</b>		<b>Credit Hours</b>
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# Department of AridLand Agriculture

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## Bachelor of Science in Horticulture

The horticultural sector is experiencing a remarkable growth in the UAE and other Gulf countries. New modern production sites emerged in many places, and formerly empty urban areas were transformed into vivid green landscapes. Experts able to develop resource-saving plant production concepts, and to properly evaluate prospects and risks pertaining to biotechnological and chemical innovations in the horticultural sector are highly demanded. The Bachelor in Horticulture offers a diverse curriculum that combines theoretical knowledge with intensive practical training in cutting edge research laboratories, on experimental farms, and through off-campus internship experiences. The program encourages students to develop their talents and special interests, and supports them on their way to become creative experts in various fields of horticultural sciences, such as organic farming, plant protection, greenhouse and nursery management, landscaping, applied biotechnology, and several more.

### Program Objectives

- Provide students with fundamental scientific information on production and protection of horticultural plants in the arid environment.
  - Develop student's skills to successfully grow a diversity of horticultural plants in a resource-efficient manner in arid environments.
  - Enhance student's ability to sustain natural resources of the country and the region, and improve the quality of the environment.
  - Provide students with new knowledge on agricultural technologies related to the UAE and the Arab world.
  - Develop student's awareness of using modern scientific methods in agriculture and horticulture and technology transfer for field applications.
- Demonstrate student's professional skills and ethics, to foster positive attitudes.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the basic characteristics of horticultural plants and cultural practices in the arid environments.
- Produce efficiently, safe horticultural crops with an understanding of the natural resources and the environment.
- Use horticultural plants and plant products for functional and aesthetic purposes in the arid environment.

- Discuss the principles and theories of integrating basic and applied aspects of modern technologies in the production and protection of horticultural plants.
- Employ technical skills for managing horticultural projects and natural resources.
- Select horticultural plants to enhance tolerance to stresses in arid environment.
- Implement technologies for improving horticultural plant productivity, quality, and protection methods.
- Improve germplasm to develop modern breeding technologies.
- Apply sustainable horticultural principles and safe environmental practices.
- Minimize the negative impact of cultural practices on the environment.
- Develop skills to maintain and protect native and exotic plant species for the purposes of beautifying the environment and commercially producing horticultural crops.
- Explain the main characteristics of the UAE society in relation to farming and adoption of technologies as a part of the Arab World.
- Discuss the similarity and integration of the Arab world in terms of the environment and natural resources.
- Conduct research using statistical methods and data analysis to establish significance of technology applications.
- Demonstrate the ability to apply the knowledge learned in coursework and during the internship experience.
- Design, execute, and evaluate technology transfer programs.
- Demonstrate communication skills necessary for leadership roles, and teamwork.
- Demonstrate critical thinking and creativity skills in learning process and applications.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**

**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU106	Introduction to Academic English For Food & Agriculture	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00

ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
PHYS105	General Physics I <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
ARAG485	Senior Project <sup>4</sup>	3.00
4 : Also counts towards the Major		

## Horticulture

<b>Required Courses (48.00 hours)</b>		<b>Credit Hours</b>
ARAG200	Principles of Soil and Water	3.00
ARAG220	Natural Resources	3.00
ARAG242	Principles of Plant Protection	3.00

ARAG307	Introduction to Horticulture	2.00
ARAG308	Soil Fertility and Fertilizer	3.00
ARAG310	Agricultural Technology Transfer	3.00
ARAG311	Plant Propagation	2.00
ARAG327	Plant Physiology and Environmental Stress	3.00
ARAG443	Irrigation, Drainage and Water Management	3.00
ARAG445	Internship	3.00
ARAG465	Salt and Drought Tolerant Plants	2.00
BIOL215	Plant Biology	3.00
BIOL225	Practical Plant Biology	1.00
BIOL270	General Genetics	2.00
CHEM111	General Chemistry I	3.00
CHEM282	Organic Chemistry for Non-Majors	3.00
CHEM283	Biochemistry for Non-Majors	3.00
STAT235	Statistics for Biology	3.00

<b>Supporting Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
ARAG323	Post-Harvest Physiology of Plant and Animal Systems	3.00
ARAG401	Sustainable Agriculture in Arid Lands	3.00
ARAG414	Plant Breeding and Horticultural Biotechnology	3.00
ARAG437	Disease and Insect Pests	3.00
ARAG439	Pesticides	3.00
AGRB352	Agribusiness Management & Entrepreneurship	3.00
BIOC230	General Microbiology	3.00

### Environment Horticulture Track

<b>Required Courses (9.00 hours)</b>		<b>Credit Hours</b>
ARAG402	Woody Plants in the Landscape	3.00
ARAG451	Landscape Management for Arid Lands	3.00
ARAG453	Indoor Plants and Flower Arrangements	3.00
ARAG454	Landscape Design	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
ARAG313	Urban Tree Management	3.00
ARAG321	Floriculture Crop Production	3.00
ARAG408	Survey of Plant Communities in Arid Lands	3.00

ARAG455	Nursery and Greenhouse Operations	3.00
ARAG456	Turfgrass Management	3.00

### Crop Production and Organic Farming Track

<b>Required Courses (9.00 hours)</b>		<b>Credit Hours</b>
ARAG305	Principles of Organic Horticulture	3.00
ARAG404	Vegetable Production in Arid Lands	3.00
ARAG407	Design of Organic Production System	3.00
ARAG452	Palms and Dates	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
ARAG320	World Herbs and Vegetables	3.00
ARAG376	Soil Processes in Organic Farming	3.00
ARAG410	Fruit Production in Arid Lands	3.00
ARAG412	Specialty Crops	3.00
ARAG442	Protected Agriculture	3.00
ARAG456	Turfgrass Management	3.00

<b>Free Electives (6.00 hours)</b>		<b>Credit Hours</b>
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# **Bachelor of Science in Marine Fisheries and Animal Science**

The consumption of animal products is strongly increasing worldwide. Young, creative experts in animal production sciences are in great demand to support the intensification of animal production while maintaining high product quality, public health and environmental sustainability. The Bachelor program in Marine Fisheries and Animal Science encourages students to excel in a wide range of animal science specializations that are highly relevant to food security in arid lands. Students are provided with up-to-date theoretical information, and receive intensive practical training in well-equipped laboratories, on our experimental stations, and through internship opportunities. Graduates of this program are ready to build their careers in, e.g. aquaculture, fisheries management, poultry and domestic livestock production, or in the sport animal business.

## **Program Objectives**

- Provide students with fundamental scientific knowledge on production and protection of domestic animals and fish in the arid environment.
- Develop student's skills to produce a wide range of animal products in a resource-efficient manner in arid environments.
- Enhance student's ability to sustain natural resources of the country and the region, and improve the quality of the environment.
- Provide students with important and new agricultural knowledge related to the UAE and the Arab world.
- Develop student's awareness of using modern scientific methods and technology transfer.
- Develop student's professional skills and ethics, and foster positive attitudes.

## **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Discuss the basic concepts of animal production and marine fisheries.
- Explain the basic characteristics of domestic animals and their husbandry in the arid environments.
- Explain populations of marine animals, and develop concepts for their sustainable use for food production.
- Employ technical skills for sustainably managing natural resources in fisheries and agricultural projects.
- Utilize and improve animal breeds with particular tolerance to stresses prevailing in arid environments.
- Manage livestock in intensive and extensive production systems.
- Improve and conserve germplasm through modern breeding technologies.
- Apply sustainable agricultural principles and safe environmental practices.
- Minimize the negative impact of fisheries and animal production on the environment.

- Maintain and protect native farm animal genotypes along with knowledge on traditional production systems, as cultural heritage and valuable source of information and genetic diversity.
- Demonstrate the understanding of the animal production and fisheries sector in the UAE and the Arab world.
- Discuss the similarity and integration of the Arab World in terms of the environment and natural resources.
- Conduct research using appropriate statistical methods for data analysis.
- Utilize library and research skills for organizing and applying information for decision making.
- Demonstrate knowledge about design, execute, and evaluate technology transfer programs.
- Demonstrate communication skills necessary for leadership roles, team work, and scientific rational discussion.
- Respect and value the living resources that serve our food production, and employ appropriate ethical standards to animal production systems and research approaches.
- Think critically, creatively and employ appropriate ethical standards to animal production systems and research approaches
- Engage in life-long learning.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**  
**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU106	Introduction to Academic English For Food & Agriculture	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
PHYS105	General Physics I <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
ARAG485	Senior Project <sup>4</sup>	3.00
4 : Also counts towards the Major		

### Marine Fisheries and Animal Science

<b>Required Courses (48.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
ARAG230	Principles of Fisheries Management	3.00
ARAG310	Agricultural Technology Transfer	3.00
ARAG314	Animal Breeding & Biotechnology	3.00
ARAG316	Animal Nutrition	3.00
ARAG319	Anatomy & Physiology of Animals	3.00
ARAG335	Production Medicine	3.00
ARAG434	Reproductive Physiology	3.00
ARAG440	Seminar in Animal Science	1.00
ARAG445	Internship	3.00

BIOL210	Animal Biology	3.00
BIOL270	General Genetics	2.00
CHEM111	General Chemistry I	3.00
CHEM282	Organic Chemistry for Non-Majors	3.00
CHEM283	Biochemistry for Non-Majors	3.00
STAT235	Statistics for Biology	3.00

### Crop Production and Organic Farming

<b>Elective Courses (9.00 hours)</b>		<b>Credit Hours</b>
AGRB352	Agribusiness Management & Entrepreneurship	3.00
ARAG323	Post-Harvest Physiology of Plant and Animal Systems	3.00
ARAG329	Organic Animal Production	3.00
ARAG450	Advanced Animal Nutrition	3.00
ARAG459	Issues in Animal Protein Production	3.00

### Marine Fisheries Track

<b>Required Courses (12.00 hours)</b>		<b>Credit Hours</b>
ARAG325	Fisheries Management and Conservation	3.00
ARAG326	Mariculture	3.00
ARAG424	Fish Breeding and Propagation	3.00
ARAG425	Shellfish and Molluscan Aquaculture	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
ARAG426	Aquatic Ecology	3.00
ARAG428	Animal Welfare	3.00
ARAG430	Fisheries Stock Assessment	3.00
ARAG433	Fish Nutrition	3.00
ARAG457	Issues in Animal Protein Production	2.00
BIOC230	General Microbiology	3.00
FDSC319	Food packaging	3.00

## Animal Science Track

<b>Required Courses (12.00 hours)</b>		<b>Credit Hours</b>
ARAG318	Camel Management	3.00
ARAG322	Introductory Poultry Production	3.00
ARAG432	Sheep and Goat Production	3.00
ARAG435	Egg Production	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
ARAG304	Range and Pasture Management	3.00
ARAG339	Management of Sport Animals	3.00
ARAG423	Dairy Cattle Management	3.00
ARAG428	Animal Welfare	3.00
ARAG436	Poultry Meat Production	3.00
BIOC230	General Microbiology	3.00

<b>Free Electives (6.00 hours)</b>		<b>Credit Hours</b>
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# Department of Food Science

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## Bachelor of Science in Food Science

Food Science is concerned with the application of science and technology to the manufacturing, production, processing, packaging and distribution of safe and high quality nutritious food. The Food Science Bachelor Program is accredited by the Institute of Food Technologists (IFT), USA. Students joining this program will undergo a professional training in the five core disciplines of Food Science: Food Chemistry & Analysis, Food Safety & Microbiology, Food Processing & Engineering, Applied Food Science, and Success Skills. Graduates from this program are able to perform physicochemical analyses of foods, describe the quality and safety characteristics, and apply different processing technologies to produce and ensure safe and high quality food.

### Program Objectives

- To provide students with advanced knowledge in food science and related fields.
- To train students to conduct basic and applied research that provides fundamental and applied knowledge about food science, and addresses the needs of the food technology profession and food industry stakeholders.
- To train students to attain high level of competent and abilities including multiple task operation and communication skills.
- Equip graduates with competencies in organization & team work and thoughts of ethical, social issues and respect for diversity.
- Provide students with enhanced understanding of the national and global food sector and prepare them to work successfully in the wide range of governmental and non-governmental food control & legislation authorities and in industrial and commercial settings within the food sector.
- Equip students with competencies in critical thinking, life-long learning and leadership.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the basic principles of Food Science and its multidisciplinary scope.
- Describe the physical, chemical, and biological properties of food and their effects on food safety and sensory and nutritional quality.
- Apply analytical techniques to characterize composition and to identify physical, chemical, and biological changes in foods.
- Explain the effects of food processing, engineering, preservation, packaging, and storage on food safety and quality.
- Identify the importance of food laws and regulations in ensuring safety and quality of foods.
- Conduct applied research, and use statistical tools in experimental design and data analysis.

- Apply acquired knowledge to real world situations in food systems, components, products, and processes.
- Apply critical thinking and continued learning to professional problems.
- Communicate effectively in both oral and written forms.
- Develop organizational, team work, and leadership skills.
- Demonstrate professional skills and thoughts of ethical, social, integrity and respect for diversity.
- Demonstrate preparedness for continued reflective practice and lifelong learning relevant to careers in food science.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**  
**General Education Req. CH:39)**

<b>Cluster 1: Values to Live By (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU106	Introduction to Academic English For Food & Agriculture	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I <sup>1</sup>	3.00
1 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
PHYS105	General Physics I <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
FDSC480	Senior Project <sup>3</sup>	3.00
3 : Also counts towards the Major		

## Food Science

<b>Required Courses (60.00 hours)</b>		<b>Credit Hours</b>
ARAG323	Post-Harvest Physiology of Plant and Animal Systems	3.00
BIOC230	General Microbiology	3.00
CHEM111	General Chemistry I	3.00
CHEM112	General Chemistry II	2.00
CHEM115	General Chemistry Lab	1.00
CHEM282	Organic Chemistry for Non-Majors	3.00
CHEM283	Biochemistry for Non-Majors	3.00
FDSC260	Principles of Food Science	3.00
FDSC309	Sensory evaluation	3.00
FDSC319	Food packaging	3.00
FDSC347	Food Process Engineering I	3.00
FDSC350	Food Chemistry	3.00
FDSC351	Food Plant Sanitation	3.00
FDSC355	Food Processing	3.00
FDSC425	Internship	3.00
FDSC453	Quality Control and Assurance	3.00
FDSC454	Food Laws	2.00
FDSC470	Current Issues in Food Science	2.00
STAT235	Statistics for Biology	3.00
NUTR301	Human Nutrition	2.00

FDSC340	Food Microbiology	3.00
FDSC450	Food Analysis	3.00

<b>Elective Courses (15.00 hours)</b>		<b>Credit Hours</b>
FDSC465	Food Safety Management	3.00
FDSC357	Technology of Muscle Foods	3.00
FDSC363	Fruit and Vegetable Technology	3.00
FDSC378	Cereal Technology	3.00
FDSC402	Technical Problem Solving in Food Industry	3.00
FDSC455	Food Inspection	3.00
FDSC460	Hazard Analysis Critical Control Point (HACCP)	3.00
FDSC458	Dairy Product Technology	3.00
FDSC466	Food Product Development	3.00
FDSC477	Oil and Fat Technology	3.00

<b>Free Electives (6.00 hours)</b>		<b>Credit Hours</b>
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# Department of Nutrition and Health

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## Bachelor of Science in Dietetics

The mission of the Coordinated Program in Dietetics offered by the Nutrition and Health Department (NHD), College of Food and Agriculture, is to prepare graduates who demonstrate a commitment to serving their community and nation. The program goals and objectives support the program mission. The program aims to prepare competent graduates who are highly-qualified dietetic professionals to improve the nutritional well-being and health of the UAE population.

### Program Objectives

- The program will prepare graduates to be competent, entry-level dietitians
- The program will prepare graduates who demonstrate leadership and a commitment to community service.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Select indicators of program quality and/or customer service and measure achievement of objectives.
- Apply evidence-based guidelines, systematic reviews and scientific literature (such as the Academy's Evidence Analysis Library and Evidence-based Nutrition Practice Guidelines, the Cochrane Database of Systematic Reviews and the U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, National Guideline Clearinghouse Web sites) in the nutrition care process and model and other areas of dietetics practice.
- Justify programs, products, services and care using appropriate evidence or data.
- Evaluate emerging research for application in dietetics practice.
- Conduct research projects using appropriate research methods, ethical procedures and statistical analysis.
- Practice in compliance with current federal regulations and state statutes and rules, as applicable and in accordance with accreditation standards and the Scope of Dietetics Practice and Code of Ethics for the Profession of Dietetics.
- Demonstrate professional writing skills in preparing professional communications CRD 2.3: Design, implement and evaluate presentations to a target audience.
- Use effective education and counseling skills to facilitate behavior change.
- Demonstrate active participation, teamwork and contributions in group settings.
- Assign patient care activities to DTRs and/or support personnel as appropriate.
- Refer clients and patients to other professionals and services when needs are beyond individual scope of practice.
- Apply leadership skills to achieve desired outcomes.

- Participate in professional and community organizations.
- Establish collaborative relationships with other health professionals and support personnel to deliver effective nutrition services.
- Demonstrate professional attributes within various organizational cultures.
- Perform self-assessment, develop goals and objectives and prepare a draft portfolio for professional development as defined by the Commission on Dietetics Registration.
- Demonstrate negotiation skills.
- Assess the nutritional status of individuals, groups and populations in a variety of settings where nutrition care is or can be delivered.
- Diagnose nutrition problems and create problem, etiology, signs and symptoms (PES) statements.
- Plan and implement nutrition interventions to include prioritizing the nutrition diagnosis, formulating a nutrition prescription, establishing goals and selecting and managing intervention.
- Monitor and evaluate problems, etiologies, signs, symptoms and the impact of interventions on the nutrition diagnosis.
- Complete documentation that follows professional guidelines, guidelines required by health care systems and guidelines required by the practice setting.
- Develop and demonstrate effective communications skills for clinical and customer services in a variety of formats.
- Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management.
- Deliver respectful, science-based answers to consumer questions concerning emerging trends.
- Coordinate procurement, production, distribution and service of goods and services.
- Develop and evaluate recipes, formulas and menus for acceptability and affordability that accommodate the cultural diversity and health needs of various populations, groups and individuals.
- Participate in management of human resources.
- Perform management functions related to safety, security and sanitation that affect employees, customers, patients, facilities and food.
- Participate in public policy activities, including both legislative and regulatory initiatives.
- Conduct clinical and customer service quality management activities.
- Use current informatics technology to develop, store, retrieve and disseminate information and data.
- Analyze quality, financial or productivity data and develop a plan for intervention.
- Propose and use procedures as appropriate to the practice setting to reduce waste and protect the environment.

- Conduct feasibility studies for products, programs or services with consideration of costs and benefits.
- Analyze financial data to assess utilization of resources.
- Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.
- Code and bill for dietetics/nutrition services to obtain reimbursement for services from public or private insurers.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**  
**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU106	Introduction to Academic English For Food & Agriculture	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skill for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
PHYS105	General Physics I <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
NUTR481	Senior Project (CPD Program) <sup>4</sup>	3.00
4 : Also counts towards the Major		

### Coordinated Program in Dietetics

<b>Required Courses (69.00 hours)</b>		<b>Credit Hours</b>
BIOL270	General Genetics	2.00
BIOC275	Genetics Laboratory	1.00
BIOC230	General Microbiology	3.00
CHEM111	General Chemistry I	3.00
CHEM112	General Chemistry II	2.00
CHEM115	General Chemistry Lab	1.00
CHEM282	Organic Chemistry for Non-Majors	3.00
CHEM283	Biochemistry for Non-Majors	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
FDSC331	Fundamentals of Food Preparation	4.00
MGMT200	Fundamentals of Management	3.00
NUTR320	Nutrition I	3.00
NUTR330	Nutrition II	3.00
NUTR355	Nutrition Seminar	1.00
NUTR352	Human Nutrition in Various Ages Stages	3.00
NUTR371	Food Service Systems Management I	2.00
NUTR372	Food Service Systems Management I SP	2.00
NUTR377	Medical Nutrition Therapy I (CPD Program)	2.00
NUTR378	Medical Nutrition Therapy I SP	1.00
NUTR403	Nutrition Education and Communication (CPD Program)	2.00

NUTR404	Nutrition Education and Communication (SP)	1.00
NUTR484	Food Service Systems Management II	2.00
NUTR485	Food Service Systems Management II (SP)	1.00
NUTR486	Community Nutrition	2.00
NUTR487	Community Nutrition (SP)	1.00
NUTR488	Medical Nutrition Therapy II	2.00
NUTR489	Medical Nutrition Therapy II (SP)	1.00
NUTR490	Internship	6.00
PHYL101	Introductory Physiology	3.00
STAT235	Statistics for Biology	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
FDSC309	Sensory evaluation	3.00
FDSC352	Food Safety	3.00
FDSC355	Food Processing	3.00
NUTR396	Sports Nutrition	3.00
NUTR443	Meal Planning	3.00

<b>Free Electives (6.00 hours)</b>		<b>Credit Hours</b>
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# **Bachelor of Science in Nutritional Science**

Nutritional Science aims at understanding the relationships between nutrition, health and disease. The Nutritional Science program provides students with a solid understanding of the key role that a healthy nutrition plays in the prevention, development and treatment of most major diseases. The program also emphasizes the basic sciences and human nutrition for students planning further studies in health-related professions such as medicine, dentistry, nursing, or physical therapy.

## **Program Objectives**

- To provide knowledge, skills and professional values for a successful career in nutrition and potential entry into graduate education
- To prepare graduates who demonstrate commitment to community service, leadership, communication, research skills, knowledge as well as ethical values.

## **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Explain scientific basis of human nutrition, nutritional requirements, nutritional epidemiology and research methods.
- Implement nutritional assessment, nutrient analysis of foods and dietary planning for individuals and group.
- Describe the food chain and its impact on food choices and practices in social and behavioral contexts.
- Demonstrate ethical behavior and values of professional conduct, according to good clinical practices.
- Formulate ideas and opinions concerning food and diet.
- Evaluate appropriate theories and methods (dietary, research, statistical) for health promotion, education and nutrition-related investigations.
- Effectively perform and interpret statistical analyses for decision-making purposes in the field of nutrition.
- Demonstrate the ability to work efficiently and effectively in group.
- Communicate effectively in oral and written forms with diverse audiences.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU106	Introduction to Academic English For Food & Agriculture	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00

LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
PHYS105	General Physics I <sup>3</sup>	3.00

3 : Also counts towards the Major

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
NUTR480	Senior Research Project (NS Program) <sup>4</sup>	3.00
4 : Also counts towards the Major		

## Nutritional Science

<b>Required Courses (60.00 hours)</b>		<b>Credit Hours</b>
BIOC275	Genetics Laboratory	1.00
BIOC230	General Microbiology	3.00
BIOL270	General Genetics	2.00
BIOM229	Cell Biology I	2.00
CHEM111	General Chemistry I	3.00
CHEM112	General Chemistry II	2.00
CHEM115	General Chemistry Lab	1.00
CHEM282	Organic Chemistry for Non-Majors	3.00
CHEM283	Biochemistry for Non-Majors	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
PHYL101	Introductory Physiology	3.00
PHYS135	General Physics Lab I	1.00
STAT235	Statistics for Biology	3.00
FDSC330	Fundamentals of Food Science	3.00
NUTR320	Nutrition I	3.00
NUTR330	Nutrition II	3.00
NUTR355	Nutrition Seminar	1.00
NUTR352	Human Nutrition in Various Ages Stages	3.00
NUTR360	Immunology and Nutrition	2.00
NUTR375	Medical Nutrition Therapy I (NS Program)	3.00
NUTR401	Nutrition Education and Communication (NS Program)	3.00
NUTR443	Meal Planning	3.00
NUTR491	Internship	3.00
NUTR482	Community Nutrition (NS Program)	3.00

<b>Elective Courses (15.00 hours)</b>		<b>Credit Hours</b>
BIOM399	Molecular Biology	2.00
BIOM466	Genetic Engineering	2.00
BIOM473	Biotechnology	2.00
BIOM482	Cell Biology II	2.00
FDSC309	Sensory evaluation	3.00
NUTR396	Sports Nutrition	3.00
PHYS110	General Physics II	3.00
NUTR379	Functional Food and Health	3.00
AGRB360	Global Agri-food Trade	3.00
AGRB395	Contemporary Food Sustainability and Nutrition	3.00

<b>Free Electives (6.00 hours)</b>		<b>Credit Hours</b>
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# Department of Veterinary Medicine

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## Bachelor of Veterinary Medicine

The bachelor of veterinary medicine program is the only one of its kind in the UAE. The program is five year long, after which, graduates will be qualified veterinarians. The student will receive veterinary basic sciences education and intensive clinical training sorted by animal species and specialized discipline.

### Program Objectives

- To enable the veterinary students to acquire knowledge, practical skills, and experience needed for a qualified veterinarian.
- To enforce evidence base veterinary medicine and problem oriented problem solving methods.
- To graduate veterinarians capable of providing superior animal health care, including disease investigation and prevention, at the individual and herd or flock level.
- To meet the growing national needs for qualified veterinarians in the public and private sectors.
- To demonstrate the achievement of the PLOs by the graduation time and enable graduates pursue higher academic degrees in veterinary medical sciences or other related sciences.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Implement appropriate health care regimen for individual animals of different species.
- Monitor the health and production of animals at the herd or flock level.
- Apply high standards of public health and food safety.
- Recognize veterinary diseases and the optimal treatment and prevention methods.
- Conduct disease epidemiological investigation and veterinary research using appropriate research methods, ethics procedures, and statistical analysis.
- Communicate technical information effectively with clients, fellow professionals and intended audience.
- Synthesize information from different resources and use information technology to find up-to-date information and manage data.

### Degree Requirements

**Required Credit Hours : minimum 152 hours**  
**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU106	Introduction to Academic English For Food & Agriculture	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skill for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00

MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I <sup>1</sup>	3.00
1 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
PHYS105	General Physics I <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
VMED580	Senior project <sup>3</sup>	3.00
3 : Also counts towards the Major		

## Veterinary Science

<b>Required Courses (101.00 hours)</b>		<b>Credit Hours</b>
ARAG316	Animal Nutrition	3.00
ARAG475	Molecular Biology Genetics	3.00
CHEM111	General Chemistry I	3.00
CHEM282	Organic Chemistry for Non-Majors	3.00
CHEM283	Biochemistry for Non-Majors	3.00
STAT235	Statistics for Biology	3.00
VMED100	Animal Anatomy I	3.00
VMED120	Animal Husbandry	3.00
VMED210	Animal Physiology	3.00
VMED250	Immunity and Infection (Microbiology) I	3.00
VMED260	Neuroscience	3.00
VMED270	Presentation of Selected Clinical Cases	1.00
VMED300	Pharmacology and Toxicology	3.00
VMED310	Parasitology	3.00
VMED320	Pathology	4.00
VMED340	Clinical pathology and propaedeutic	3.00
VMED350	Infectious Diseases	3.00
VMED360	Camels and Equine Medicine	3.00
VMED370	Histology	3.00
VMED380	Case Studies I	1.00
VMED390	Training in meat inspection (Slaughter House)	1.00
VMED395	Training in Camels & Equine Sport Medicine (Animal Hospital)	1.00
VMED400	Preventive medicine	2.00
VMED410	Surgery	4.00
VMED420	Anesthesiology	2.00
VMED430	Case Studies II	1.00
VMED440	Sheep and goat medicine	3.00
VMED450	Theriogenology	3.00
VMED460	Companion Animal Medicine	2.00
VMED490	Training in Clinical Surgery (Animal Hospital)	1.00

VMED495	Training in Sheep & Goats Med & Surgery (Animal Hospital)	1.00
VMED510	Ophthalmology and Dermatology	2.00
VMED520	Diagnostic imaging	2.00
VMED530	Seminar in Veterinary Science	1.00
VMED590	Internship in Animal Hospital	9.00
VMED150	Animal Anatomy II	4.00
VMED280	Immunity and Infection II	3.00
VMED385	Meat Hygiene	2.00

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
FDSC280	Food Hygiene	3.00
ARAG470	Camels and Equine Nutrition	3.00
VMED240	Animal Welfare and Ethics	3.00
VMED110	Introduction to Veterinary Medicine	3.00
VMED330	Poultry Medicine	3.00
VMED455	Clinical Pharmacology	3.00
VMED445	Large animals (Cattle & Dairy Cattle)	3.00
VMED470	Falcon Medicine	2.00
VMED475	Exotic and Laboratory Animal Medicine	1.00

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# College of Humanities and Social Sciences

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## Department of Arabic Language & Literature

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### Bachelor of Arts in Arabic Language and Literature

The Arabic Department's mission aims at preserving and enriching Arabic Language as a written text and spoken discourse capable of reflecting the diversity and complexity of the Arabic/ Islamic culture and civilization. The Department is also determined to enhance and develop Arabic Language teaching and pedagogy in a sophisticated way in order to reinforce the Arabic / Islamic identity of the nation. Further, the Department aims to academically prepare a generation of graduates, holders of a college degree in Arabic Language and Literature, able to participate in the enrichment of the intellectual, cultural and educational institutions inside and outside UAE. As a center of cultural illumination and scholarship, the Arabic Department at UAEU supports multi-disciplinary activities promoting inter-civilizational dialogue and giving priority to genuine social values and moral traditions. In addition to a deep- rooted interest in Arabic literary heritage, the Department aims to build bridges with other cultures exploring new avenues of cultural diversity and integrating foreign language education in its curriculum.

#### Program Objectives

- Developing students' knowledge of language and organizing modern linguistic theories that student studied them.
- Developing students' knowledge of literature and criticism and deepening understanding of the heritage ,Literature and contemporary literary and critical theories.
- Giving students the skills that would enable them to exercise good reading, comprehension and expression.
- Developing methods of scientific research and critical thinking.
- Developing love and faith to the homeland, nation, language and belief in the human values.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Form the structure of the word according to dictionaries and Morphological rules.
- Mention verbal changes, meters and meanings.
- Control vocabulary use grammatically according to language standards.
- Shape linguistic structures correctly according to grammatical rules.
- Demonstrate knowledge of modern linguistic theories in the analysis of the structures and detecting their implications.
- Explain literary text and revealing meaning, purpose and images.
- Show the most important critical issues addressed by the old critics.
- Demonstrate knowledge of modern theories of criticism.

- Listen the most important sources of literary heritage, rhetoric, criticism and their authors.
- know famous (the figures) poets, writers and their ages and literary production.
- Read the text correctly without linguistic or stylistic errors.
- Express orally an accurate expression of the meanings and purposes of the texts.
- Criticize the text objectively.
- Analyze text in literary and Scientific way.
- Explain the literary image revealing the elements of its aesthetic values.
- Specify the subject of the search to allow Innovation and creativity
- Specify the method and the plan that suit search subject .
- Use the Library and Network in obtaining sources and the preparation of the scientific subject
- Discuss opinions and views rationally and scientifically.
- Write search in a way that demonstrates scientific thinking and linguistic aesthetics.
- Provide evidences of the impact of our Arabic creativity in human heritage
- Express writings that shows the richness of language and its ability to deal with modern age.
- Demonstrate pride of nation, faith, and richness of Arabic and Islamic culture and Heritage.
- Collaborate with others to accomplish the scientific goals of team work research

## Degree Requirements

**Required Credit Hours : minimum 120 hours**  
**General Education (Req CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS122	Modern World History	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>2</sup>	3.00
2 : Also counts towards the Major		

### Arabic Language and Literature Major (Req CH:42)

<b>Required Courses (21.00 hours)</b>		<b>Credit Hours</b>
ARB100	Styles of Literary Expression	3.00
ARB110	Introduction to Syntax & Morphology	3.00
ARB120	Arabic Rhetoric I	3.00

ARB130	Literary Texts Analysis	3.00
ARB160	General Linguistics	3.00
ARB406	Research Methods in Language & Literature	3.00
ARB430	Modern Literature Criticism	3.00

**Concentrations - Student must choose Language or Literature**

<b>Language Required Courses (12.00 hours)</b>		<b>Credit Hours</b>
ARB210	Phonetics	3.00
ARB311	Syntax II	3.00
ARB321	Semantics & Arabic Lexicology	3.00
ARB413	Arabic Linguistics	3.00

<b>Literature Required Courses (12.00 hours)</b>		<b>Credit Hours</b>
ARB250	Abbasid Literature I	3.00
ARB343	Pre-Islamic & Islamic Literature	3.00
ARB444	Modern Arabic Literature	3.00
ARB450	Comparative Literature	3.00

<b>Elective Courses for Both Concentrations (9.00 hours)</b>		<b>Credit Hours</b>
ARB220	Prosody	3.00
ARB230	Traditional Literary Criticism	3.00
ARB240	Arabic Rhetoric II	3.00
ARB260	Emirati Literature	3.00
ARB270	Modern Arabic Gulf Literature	3.00
ARB301	Abbasid Literature II	3.00
ARB381	Arabic Library / Heritage	3.00
ARB401	Philology	3.00
ARB416	Andalusian & Maghribi Literature	3.00
ARB424	Late Medieval Literature	3.00
ARB436	Ex. in Syntax & Morphology	3.00
ARB440	Research in the Critical & Rhetorical H	3.00

## Minors and Free Electives (Req. CH:39)

### Minor (1) (18.00 hours)

Credit Hours

Optional Minor (Students can either take Minor (2) or 18 credit hours from any free elective courses.)

### Minor (2) (18.00 hours)

Credit Hours

ARB305	Professional Writing	3.00
ARB105	Creative Writing	3.00
ARB205	Writing and Technology	3.00
ARB405	Training Practicum	3.00
MSC235	Principles of the Writing for Media	3.00
TRS200	Introduction to Translation	3.00

### Free Elective (3.00 hours)

Credit Hours

## Minor in Writing (Interdisciplinary in Arabic)

This Minor helps graduates to work at media institutions, where they practice writing essays, reports and other types of writing to T.V., newspapers.. etc. This Minor also develop graduates skills and expertise, then prepare them to work in cultural associations and centers, where they put their theoretical experience in practice.

### Program Objectives

- To help students to develop graduate skills in writing for T.V, newspapers..etc.
- To put a theoretical experience in practice and prepare students to work in cultural associations and centers

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Introduce an understanding of the different nature of, and skills required for professional and creative writing in Arabic.
- Demonstrate greater skills in written communications in Arabic
- Develop critical and creative language awareness.
- Have an increased awareness of the place of creative and professional writing in Arabic within an increasingly globalized UAE society.
- Improve aptitudes and skills necessary for further scholarship or employment in the domains in which Arabic writing is studied or practiced.

### Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Students must take these courses**

Required Courses (18.00 hours)		Credit Hours
ARB105	Creative Writing	3.00
ARB205	Writing and Technology	3.00
ARB305	Professional Writing	3.00
ARB405	Training Practicum	3.00
MSC235	Principles of the Writing for Media <sup>1</sup>	3.00
TRS200	Introduction to Translation <sup>2</sup>	3.00

1 : Mass Communication students take ARB 130  
2 : Translation students take ARB 130

## Minor in Women and Culture (Arabic)

The Minor in Cognitive Science is an interdisciplinary program that investigates issues concerning the brain and the mind from the perspective of philosophy, psychology, linguistics, biology and information technology. The issues investigated include mental functions such as memory, perception, decision-making, linguistic competences and motor control. Students in the Minor choose a primary specialization in one of the core disciplines of the program and a secondary specialization in one of other core disciplines.

### Program Objectives

- Gain theoretical grounded in in women’s studies.
- Demonstrate an understanding of representative works of women’s literature.
- Improved critical and creative thinking applied to interdisciplinary perspectives on women.
- Have an understanding of the relationships between contemporary cultural theses with local, regional and international patters

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use some tools from women's studies to analyze Arabic literary, cultural and critical discourses
- Apply some tools from women’s studies to analyze Arabic literary, cultural and critical.
- Describe different critical perspectives on women's literary theory
- Demonstrate an enhanced self awareness
- Enhance a critical understanding of images of women in the media.
- Demonstrate an understanding the rule and the image of women in spoken and written language through the history of writing and speaking.

### Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Students must take these courses**

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
ARB115	Womens Literary Theory	3.00
ARB215	Womens Studies & Arabic Literature	3.00
ARB315	Modern Women's Literature	3.00
ARB415	Seminar & Research in Women Studies	3.00
LNG465	Women and Language	3.00
MSC487	Women and Media	3.00

# Department of English Literature

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## Bachelor of Arts in English Literature

English is one of the most widely spoken languages and is rapidly becoming the international language of the world. The English Literature Department integrates English language and literature to help second language learners expand the boundaries of their future careers. The students' ability to read, analyze and criticize different texts in English and their knowledge of Western culture prepare them to be engaged in a post-globalized work-market in a variety of areas. Moreover, an awareness of informal and analytical writing strategies in English can also provide students with a wide range of skills which can be used in future studies, work, industry and business. The Department of English offers a Major degree tailored to fulfill the needs of Arab learners pursuing work opportunities in public and private sectors. Besides mastering language skills, students become proficient in the historical, sociological, political, psychological and cultural contexts out of which English/American literature has grown. This comprehensive pedagogical approach is supplemented with Minors in writing skills, theatre studies, film / cinema studies, English language and Literacy and Fine Arts.

### Program Objectives

- Read and discuss a substantial number of complex works of literature and criticism in English.
- Write a substantial number of analytical as well as informal assignments in English.
- Interrogate the relationships between literary works and their historical and cultural contexts.
- Investigate the connections made by literature between individuals, across boundaries of time and space.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use appropriate terminology to identify key features of literary texts, genres, periods, techniques or devices.
- Critique literary texts with reference to formal or aesthetic properties as well as to socio-historical rootedness and function.
- Communicate appropriately and successfully, orally and in writing, on specialist as well as non-specialist subject matter, in a variety of academic or non-academic contexts.
- Demonstrate willingness and ability to undertake further studies in literature or related disciplines, or to assume positions of responsibility in the world of work or civic engagement.
- Apply generic skills and competences developed in the course of the program, such as critical thinking, problem-solving or team-work, in the world of work or civic engagement.
- Undertake research with competent and proper use of printed as well as electronic resources, and of quantitative as well as qualitative methods.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:36)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication (6.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00
ENG300	Critical Reading in the Disciplines	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00

1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00

MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS122	Modern World History	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00
PSG270	Comparative Political Systems	3.00
SOC201	Social & Cultural Change	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00

ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone	3.00

### English Literature Major (Req. CH:39)

<b>Required Courses (27.00 hours)</b>		<b>Credit Hours</b>
ENG250	English Grammar & Usage	3.00
ENG310	Writing for Research	3.00
LIT150	Introduction to Literature	3.00
LIT220	Survey of British Literature	3.00
LIT240	Survey of American Literature	3.00
LIT300	Methods of Research in Literary Study	3.00
LIT320	Elizabethan & 17th Century Literature	3.00
LIT410	Criticism and Theory	3.00
LIT420	Senior Seminar Major writer	3.00

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
LIT330	Romantic & Victorian Literature	3.00
LIT335	20th Century British Literature	3.00
LIT340	19th Century American Literature	3.00
LIT345	20th Century American Literature	3.00
LIT365	Modern World Literature	3.00
LIT370	Anglophone Literature Outside UK & US	3.00
LIT385	Children's Literature	3.00

**Minors and Free Electives (Req. CH:45)**

**Minor (1) (18.00 hours)**

**Credit Hours**

**Optional Minor (Students can either take Minor (2) or 18 credit hours from any free elective courses.**

**Minor (2) (18.00 hours)**

**Credit Hours**

**Free Electives (9.00 hours)**

**Credit Hours**

## Minor in Creative and Professional Writing in English

Technical and Professional Writing is part of our effort to collapse the better and more relevant aspects of the Writing Minor into the Language Minor (see proposed amendments to the Minor below). The idea is to help springboard students into professional life in ways that enhance verbal and text-based literacies and prepare them for the kinds of discursive and communicative acts they will likely encounter in their professions. The requirement of two 400-level courses in a Minor was, we felt, off-putting to potential Minors. 450 and 452 will stand as options to each other in the Minor—while both include elements of both textual and verbal literacy, each has its own focus, which allows students to choose this vital 400-level requirement according to their interests or strengths.

### Program Objectives

- Develop fiction/non-fiction writing and publication skills.
- Develop language editing skills to a professional standard.
- Apply electronic publishing skills.
- Apply effective group management skills.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Produce English texts consistent with professional requirements.
- Edit English texts to conform to professional requirements.
- Demonstrate knowledge of electronic publishing techniques.
- Collaborate with others to produce electronic publications.

### Degree Requirements

Required Credit Hours : N/A

#### Creative and Professional Writing in English

Required Courses (18.00 hours)		Credit Hours
EWR215	Advanced Composition TA	3.00
EWR390	Creative Writing Fiction	3.00
EWR395	Tech & Prof Writing TA	3.00
EWR480	Practicum Writing	3.00
DRA370	Playwriting & Performance in Arabic <sup>1</sup>	3.00
MSC235	Principles of the Writing for Media	3.00
EWR380	Creative Writing Non-fiction <sup>2</sup>	3.00
1 : Take only one		
2 : Take only one		

## Minor in English Language and Literacy

Completion of the English Language and Literacy Minor will increase the employability of graduates by supporting their language learning and advancing their acquisition of verbal (speaking and listening) and textual (reading and writing) literacy in English in ways that complement any major degree. The Minor will provide a rigorous, university-level forum for students who wish to develop higher-level English skills for personal or employment purposes, but who do not wish to follow specialized courses in English Literature, Translation or Linguistics. However, the Minor will complement and enhance those and other majors in its emphasis on facility in language in preparation for professional life.

### Program Objectives

- Increase communicative proficiency and accuracy.
- Present, orally and in writing, referenced works of scholarly/professional merit.
- Develop textual and cultural literacy.
- Apply language corrective/maintenance strategies to address limits of knowledge.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate comprehension and appropriate use of core university-level vocabulary
- Demonstrate comprehension of written/spoken texts addressed to a college-level audience.
- Produce written and oral presentations consistent with fluency and coherence expectations found at the college/professional level.
- Demonstrate the ability to work collaboratively and individually to learn, create and exhibit knowledge.
- Address impediments to effective communication

### Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**English Language and Literacy Minor**

Required Courses (18.00 hours)		Credit Hours
ENG210	College Reading and Writing	3.00
ENG250	English Grammar & Usage	3.00
ENG300	Critical Reading in the Disciplines	3.00
ENG310	Writing for Research	3.00
ENG312	Cultural Literacy: English in the World	3.00
ENG450	Public Speaking and Debate <sup>1</sup>	3.00
ENG454	Practicum: Writing for the Workplace	3.00
<sup>1</sup> : Students must take one only		

## Minor in Fine Arts

The Fine Art Minor includes six courses. These courses introduce students to both the theory and practice of visual art. The sequence mixes studio and study classes, so that students gain an understanding and appreciation of history and appreciation of the context, background, situation and frontiers of visual communication. The courses provide exposure to the great traditions of Islamic and Arabic art, Eastern, African, and Western art, as well as cross-cultural ideas and values. Students also gain hands-on experience in the production of artifacts. Employment opportunities include graphic design, web design, industrial design, museum administration, and arts management.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an awareness of the history of visual communication.
- Identify various theories of and practices of visual communication.
- Evaluate various theories and practices with regards to cultural and historical contexts.
- Apply theoretical knowledge to the production of original art works.
- Demonstrate critical awareness of visual communication and its uses in various cultural contexts.

### Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Fine Arts**

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
ART201	Drawing I	3.00
ART301	Painting I	3.00
ART302	3-D Design	3.00
ART303	Digital Photography	3.00
MSC462	Designing Media Messages	3.00

<b>Elective Courses (Students must take one of the following courses:) (3.00 hours)</b>		<b>Credit Hours</b>
ART101	Arts and Society I	3.00
ART102	Arts and Society II	3.00
ART382	Introduction to Art Criticism	3.00

## Minor in Film Studies

The Minor in Film Studies trains students to apply film criticism as well as to participate in the production of short films. The program includes six core courses, three of which focus on film analysis. The developing ideas and applying them to script formats leads to the acquisition of technical skills required for filmmaking. Two electives are devoted to Arab Cinema on one hand and to the genre of animation film on the other.

### Program Objectives

- Improve the ability of students to view films critically.
- Create an awareness of international film industries and their significance for the development of film history.
- Illustrate the individual steps in the film production process.
- Engender participation in original film production.
- Situate local productions within the larger context of world cinema.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze a wide variety of films critically
- Demonstrate knowledge of key developments in film history
- Generate ideas for original film production
- Contribute to the creation of short films.
- Apply generic skills such as critical thinking, problem-solving and team work

### Degree Requirements

**Required Credit Hours : minimum 18 hours**

**Core Courses: Students must take these courses**

Required Courses (15.00 hours)		Credit Hours
FIL240	Introduction to Film & Visual Studies TA	3.00
FIL245	Film & Culture World Cinema TA	3.00
FIL340	Developing Ideas for Film	3.00
FIL345	Principles of Screenwriting TA	3.00
MSC485	Practicum in Digital Production	3.00

Elective Courses (3.00 hours)		Credit Hours
FIL350	Cinema in the Arab World TA	3.00
MSC487	Women and Media	3.00
FIL312	Animation Filmmaking	3.00

# Minor in Drama

Students taking the Drama Minor learn to analyze drama and produce short plays. There are six courses in the program, three of which focus on analyzing drama, one focuses on playwriting, and two on production. All courses involve the production of drama events. This program increases the employability of graduates and complements other majors by teaching extensive project and event management skills, idea development, behavioral analysis, metacognitive thinking, and verbal and textual communication.

## Program Objectives

- Situate key dramatic works and perspectives across a range of styles and periods.
- Explore ways to interpret human behavior and communicate across obstacles using dramatic texts as case studies and drama project management as practical experience.
- Create and manage short and complex dramatic projects in stages.
- Collaborate and coordinate on different levels, combining performance and technical jobs into a single project, combining projects into an event, combining events into a festival.
- Manage elaborate events.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze a wide variety of plays critically.
- Perform a range of jobs necessary to produce a short play.
- Interpret and produce a short play.
- Manage a live performance event.
- Apply generic skills such as metacognitive thinking, problem-solving and team work.

## Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Drama**

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
DRA260	Practical Introduction to Theatre TA	3.00
DRA265	Approaches to Drama TA	3.00
DRA365	Drama in Education TA	3.00
DRA370	Playwriting & Performance in Arabic	3.00
DRA360	Fundamentals of Stage Prod TA	3.00
DRA460	Practicum Drama TA	3.00

# Department of Geography and Urban Planning

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## Bachelor of Arts in Geography

The Geography Department was established in 1977, and it continually changes its curriculum to meet the ever-changing market demands. Its foci of research activities include, but are not exclusive to the geography of UAE and the Arab world, urbanization and transportation, population growth, globalization, global climate change, resource management, water resources, agricultural and manufacturing activities, the geography of crime and health services, spatial and analytical techniques necessary to understand them and using the new tools of geography, Remote Sensing and Geographical Information Systems. The Department in cooperation with other Departments within the University had started in 2005 the Master Program of Remote Sensing and GIS. The growing significance of Geography in the UAE was recognized on January 4, 2010, with the formation of the UAE Geographical Society. As the only tertiary institution in the UAE offering geography degrees, our Department has taken a leading role in promoting the discipline, with several faculty elected to offices in the society.

### Program Objectives

- To provide students with the theoretical and practical foundation (knowledge) in physical and human geography, geospatial science (Cartography, GIS, Remote Sensing), and urban planning.
- To equip students with critical thinking and geospatial technical skills.
- To prepare students for conducting quantitative and qualitative researches and embedding ethics in social and environmental problems.
- To produce multidisciplinary graduates who can contribute to the development of UAE in particular and the world in general.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss physical Geography and human aspects and the interaction between them.
- Use Geoinformatics related software effectively.
- Evaluate human impact on the natural environment.
- Effectively communicate geographical ideas orally and in writing.
- Conduct research addressing local urban planning and global environmental issues.
- Demonstrate ethical reasoning in relation to Geography and Urban Planning issues.
- Develop organizational, team work and leadership skills.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00
FOED102	Professional Ethics in Education	3.00

<b>Cluster 2: Skills for Life - English Communication (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

*1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours*

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00

LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
GEO200	World Regional Geography <sup>2</sup>	3.00
<i>2 : Also counts towards the Major</i>		

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (3.00 hours)</b>		<b>Credit Hours</b>
GEO201	Physical Geography <sup>3</sup>	3.00
<i>3 : Also counts towards the Major</i>		

<b>Cluster 4: The Natural World - Natural Sciences -- Student should take one of the following courses: (3.00 hours)</b>		<b>Credit Hours</b>
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
PHED201	Physical Fitness and Wellness	3.00
CHEM181	Chemistry in the Modern World	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>4</sup>	3.00
4 : Also counts towards the Major		

### Geography Major (Req. CH:33)

<b>Required Courses (9.00 hours)</b>		<b>Credit Hours</b>
GEO210	Human Geography	3.00
GEO220	Principles of Cartography	3.00
GEO221	Geographic Information Systems I	3.00

Students should take one of the following Tracks: (Req. CH:24) 1: Environmental Geography Track

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
GEO211	Remote Sensing	3.00
GEO413	Geomorphology	3.00
GEO452	Climatology	3.00
GEO462	Current Environmental Issues	3.00
GEO400	Practicum	3.00
GEO410	Research Seminar in Geography	3.00

<b>Elective Courses (9.00 hours)</b>		<b>Credit Hours</b>
GEO231	Economic Geography	3.00
GEO341	Geography of Population	3.00
GEO402	Land Use	3.00
GEO411	Oceanography	3.00
GEO412	Geography of Arid Lands	3.00
GEO431	Natural Hazards	3.00
GEO443	Geography of Transportation	3.00

## 2: Geoinformatics Track

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
GEO211	Remote Sensing	3.00
GEO334	Spatial Analysis	3.00
GEO420	Cartography II	3.00
GEO422	Geographic Information Systems II	3.00
GEO400	Practicum	3.00
GEO410	Research Seminar in Geography	3.00

<b>Elective Courses (9.00 hours)</b>		<b>Credit Hours</b>
GEO351	Computer Maps	3.00
GEO382	Geography of Industry	3.00
GEO402	Land Use	3.00
GEO432	Geography of the UAE	3.00
GEO443	Geography of Transportation	3.00
GEO451	Digital Imaging Analysis	3.00
GEO452	Climatology	3.00

## 3: Urban Planning Track

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
GEO334	Spatial Analysis	3.00
GEO372	Planning Theory and Practice	3.00
GEO481	Urban Planning Internship	3.00
GEO402	Land Use	3.00
GEO438	Regional & Urban Planning	3.00

<b>Elective Courses (9.00 hours)</b>		<b>Credit Hours</b>
GEO232	Urban Economics	3.00
GEO345	Urban Demography	3.00
GEO370	Transit Oriented Development (TOD)	3.00
GEO440	GIS for Urban & Regional Planning	3.00
GEO463	Tourism Policy and Planning	3.00
GEO472	Politics and Planning	3.00

**Minors and Free Electives (Req. CH:48) Required Minor**

**Minor (1) (18.00 hours)**

**Credit Hours**

Optional Minor (Students can either take Minor (2) or 18 credit hours from any free elective courses.)

**Minor (2) (18.00 hours)**

**Credit Hours**

**Free Electives (12.00 hours)**

**Credit Hours**

## Minor in Geoinformatics

The department of Geography and Urban Planning at UAEU offers a minor in Geo-informatics (GIS). The minor is open to all university students but is primarily geared to serve interested students from geography, geology, and engineering departments. Students should have the department approval to enroll. The minor completion requires students to take a total of 18 credit hours spread in 6 courses. Upon successful completion of the minor program the students should have gained knowledge and developed skills on how GIS and spatial data analysis can be used in various fields such as transportation, urban planning, petroleum, coastal management, environment, and GIS project management.

### Program Objectives

- Provide an introduction to the concepts, principles, and theories of Geographic Information Systems (GIS).
- Expose students to the GIS geographic data sources and constraints.
- Develop practical hands-on experience using GIS software.
- Train students on conducting GIS projects.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate understanding of vector and raster models, database development, management techniques, and spatial analysis.
- Evaluate the quality and suitability of GIS data for diverse applications.
- Illustrate proficiency in the use of GIS software to build database, perform spatial analysis, prepare maps, reports, and charts for presentation of results.
- Apply GIS analysis techniques in various fields such as transportation, urban planning, petroleum, coastal management, environment, and GIS project management.

### Degree Requirements

**Required Credit Hours : minimum 18 hours  
Geoinformatics**

<b>Required Courses (6.00 hours)</b>		<b>Credit Hours</b>
GEO220	Principles of Cartography	3.00
GEO221	Geographic Information Systems I	3.00

<b>Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
GEO430	GIS for Transportation	3.00
GEO440	GIS for Urban & Regional Planning	3.00
GEO450	GIS for Coastal Management	3.00

GEO460	GIS for Petroleum	3.00
GEO470	GIS for Environment	3.00
GEO480	GIS for Project Management	3.00

# Department of History and Archaeology

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## Bachelor of Arts in Tourism Studies

The mission of the Tourism Studies program is to provide a nationally and internationally recognized program of excellence in teaching, research, and service in leisure, specifically in the areas of tourism, heritage, cultural tourism and tourism planning and management. This program aims to educate, train and assist students, individuals, businesses, and other stakeholders to take full use of the opportunities available through the use of responsible tourism development. This program philosophy is driven by the belief that tourism can be a powerful driver for economic development in many emerging and transitioning economies, and can also fulfill a significant role in a community social-cultural development, congruent with the cultural norms and values of the multicultural populations of the UAE.

### Program Objectives

- Basic knowledge of different components and sectors in the tourism industry.
- Competence to address and provide critical insights of the interrelationship between stakeholders, components and sectors in the tourism industry.
- Solid knowledge about planning, managing, operating and promoting cultural, heritage, environmental and leisure tourism resources and products.
- Practical knowledge of planning, developing, managing, operating and promoting sustainable destinations.
- Ability to conduct research with the focus on the relationships between tourism, culture, heritage and sustainable development.
- Communication skills, managerial skills and analytical skills, to enter the junior management level of different sectors in the tourism industry.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify the facilities, resources, products, stakeholders and operational organizations in different sectors of the tourism industry as well as describe their structures and characteristics.
- Demonstrate ethical reasoning in relation to tourism issues.
- Identify the necessary resources of developing tourism products and analyze the factors affecting the successfulness of tourism products.
- Analyze the current and upcoming trends of the tourism product development in the local, regional and international level.
- Identify the influence of tourists and the tourism industry on cultural and heritage assets, societies and environments.

- Synthesize the cultural, heritage, environmental and leisure tourism resources and facilities for sustainable development of a destination.
- Examine materials, reports and statistics related to tourism, cultural and heritage study and sustainable development.
- Communicate effectively in both oral and written form to various audience.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**  
**General Education (Req CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00
FOED102	Professional Ethics in Education	3.00

<b>Cluster 2: Skills for Life - English Communication (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>2</sup>	3.00
<sup>2</sup> : Also counts towards the Major		

### Tourism Major (Req CH:39)

<b>Required Courses (21.00 hours)</b>		<b>Credit Hours</b>
HIS372	Arch. of UAE & A. Gulf States	3.00
TOR101	Introduction to Tourism	3.00
TOR202	Fundamentals of Heritage Management	3.00
TOR205	Introduction to Cultural Tourism	3.00
TOR222	Principles of Tour Guidance	3.00
TOR421	Intensive Research in Tourism	3.00
TOR440	Internship in Tourism & Architecture	3.00

### Elective Courses

<b>Cluster 1: Theoretical/Survey - Students must take two courses from this cluster, one of which must be at the 400 level (6.00 hours)</b>		<b>Credit Hours</b>
GEO432	Geography of the UAE	3.00
GEO461	Geography of Tourism	3.00

PSG120	Government & Politics of UAE	3.00
PSG250	Principles of International Relations	3.00
TOR263	Tourism Resources in the UAE	3.00
TOR350	Tourism and the Environment	3.00
TOR403	Tourism and Society	3.00
TOR404	Sustainable Tourism Development & Planning	3.00

<b>Cluster 2: Heritage - Students must take two courses from this cluster, one of which must be an art course (6.00 hours)</b>		<b>Credit Hours</b>
HIS121	World History: Origins to 1500	3.00
HIS133	Introduction to Art History	3.00
HIS215	Ancient History & Archaeology of Near East	3.00
HIS217	Material Culture of Islamic World	3.00
HIS310	Introduction to Archaeology & Museum Studies	3.00
HIS381	UAE Architectural Heritage	3.00
HIS471	Modern and Contemporary History of the Arab Gulf	3.00
TOR322	Gulf art and design	3.00

<b>Cluster 3: Tourism and Heritage Operation - Students must take two courses, one of which must be enterprise or management (6.00 hours)</b>		<b>Credit Hours</b>
MGMT200	Fundamentals of Management	3.00
MKTG200	Principles of Marketing	3.00
MSC243	Public Relations & Advertising Principles	3.00
TOR140	Introduction to Museology	3.00
TOR416	Travel Writing & New Technologies	3.00

### Minors and Free Electives (Req. CH:42)

<b>Required Minor (1) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Optional Minor (2) (Students can either take Minor (2) or 18 credit hours from any free elective courses.) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Free Electives (6.00 hours)</b>	<b>Credit Hours</b>
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# Bachelor of Arts in History

The History major provides students with a broad background in the historical trends which have shaped the modern world and led to the development of a contemporary society, culture and politics in the Islamic world and the United Arab Emirates. The aim of the History major is transmit knowledge and understanding of history and to promote awareness of the past and to open minds to the possibilities of the future. Students who are studying history are expected to learn not only basic facts of history, but also the contemporary methodologies that historians use to reconstruct and interpret the past, in order to better understand the present and the future.

## Program Objectives

- Understanding of both the scientific methods and literary values of history.
- Knowledge of the historical forces shaping the past, present and future world.
- Capacity to analyze historical sources and arguments.
- Ability to express ideas and judgment independently in intellectually coherent and elegant writing.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Define historical methodologies.
- Use historical knowledge to demonstrate an understanding of his/her own social system and those of others.
- Explain the historical forces shaping the current Arab world and particularly the Gulf region.
- Demonstrate ethical reasoning in relation to historical issues.
- Explain, using examples, the importance of change and continuity over time.
- Analyze the causes of the rise and fall of a particular culture.
- Examine the content of a particular document or historical text and present objectively an independent analysis of its background and effect.
- Communicate effectively in both oral and written form to various audience.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**

**General Education (Req CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00

PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

### Cluster 2: Skills for Life - English Communication Skills (3.00 hours)

Credit Hours

ESPU1014	Introduction to Academic English for Humanities and SS	3.00
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### Cluster 2: Skills for Life - Information Literacy (3.00 hours)

Credit Hours

GEIL101	Information Literacy	3.00
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### Cluster 2: Skills for Life - Thinking Skills (3.00 hours)

Credit Hours

HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

### Cluster 3: The Human Community - Emirates Society (3.00 hours)

Credit Hours

HSS105	Emirates Studies	3.00
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### Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)

Credit Hours

ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History <sup>2</sup>	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<sup>2</sup> : The Archaeology concentration Students must not take this course in this area

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
HIS122	Modern World History <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>4</sup>	3.00
4 : Also counts towards the Major		

## History Major

<b>Required Courses for both concentrations (12.00 hours)</b>		<b>Credit Hours</b>
HIS121	World History: Origins to 1500	3.00
HIS142	History of Islamic World: Origins 1500	3.00
HIS212	History of the UAE	3.00
HIS373	Hist. of Arab World from 1500	3.00

## History Concentration (Req CH:27)

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
HIS200	Methodology & Historiography	3.00
HIS318	History of the Arabian Gulf	3.00
HIS376	Special Topics I	3.00
HIS377	Special Topics II	3.00
HIS301	Research Project	3.00

<b>Islam and the Arab World (6.00 hours)</b>		<b>Credit Hours</b>
HIS124	Rise of Islam & Omayyad state	3.00
HIS245	Relationship between East & West in Middle Ages	3.00
HIS251	History of the Islamic West	3.00
HIS332	Ancient History & Archaeology Arabian of the Peninsula	3.00
HIS352	History of the Abbasid State	3.00
HIS378	History of Trade in the Indian ocean till 1500	3.00

<b>The Modern and Contemporary World (6.00 hours)</b>		<b>Credit Hours</b>
HIS123	American History	3.00
HIS213	Medieval West: 600-1500	3.00
HIS239	History of Africa:1800-present	3.00
HIS241	Modern History of Europe	3.00
HIS243	History of East Asia	3.00
HIS374	Public History	3.00
HIS375	Hist. of Islam World from 1500	3.00

## Archaeology Concentration (Req. CH:24)

<b>Required Courses (24.00 hours)</b>		<b>Credit Hours</b>
HIS217	Material Culture of Islamic World	3.00
HIS133	Introduction to Art History	3.00
HIS215	Ancient History & Archaeology of Near East	3.00
HIS310	Introduction to Archaeology & Museum Studies	3.00
HIS311	Archaeology Field Methods	3.00
HIS372	Arch. of UAE & A. Gulf States	3.00
HIS301	Research Project	3.00
HIS401	Internship in Museum Studies	3.00

<b>Elective (3.00 hours)</b>		<b>Credit Hours</b>
HIS379	Maritime Archaeology <sup>5</sup>	3.00
5 : Or can select from any History offering		

## Minors and Free Electives (Req. CH:36) Required Minors

<b>Minor (1) (18.00 hours)</b>	<b>Credit Hours</b>
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Optional Minor (Students can either take Minor (2) or 18 credit hours from any free elective courses.)

<b>Minor (2) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Free Electives for History (6.00 hours)</b>	<b>Credit Hours</b>
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<b>Free Electives for Archaeology (9.00 hours)</b>	<b>Credit Hours</b>
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# Minor in Cultural Resource Management

This minor provides students with the tools to work in the public or private sectors in the UAE as well as other countries. Within the UAE, there is a growing awareness of the nation's rich cultural resources and a movement toward their preservation. Before preservation can occur, however, expertise is required in archaeology, historical preservation, and the place of Emirati and Arab culture in the world — the minor in Cultural Resource Management offers this much-needed knowledge.

## Program Objectives

- Preparing students for advancement in the field of Cultural Resource Management.
- Introducing students to various concepts, methods, and techniques commonly used in CRM.
- Promoting effective management of cultural resources.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Recognize and explain patterns of change through the study of material culture and documents.
- Develop familiarity with the special art, culture and history of the UAE and Arab Gulf region.
- Identify methods of protecting and preserving architectural, artistic and cultural heritage.
- Evaluate and appreciate the significance of heritage preservation in UAE and international contexts.

## Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Cultural Resource Management**

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
HIS132	Fundamentals of Archeology	3.00
HIS312	Historical Preservation	3.00
HIS318	History of the Arabian Gulf	3.00
HIS372	Arch. of UAE & A. Gulf States	3.00
HIS381	UAE Architectural Heritage	3.00

<b>Elective Courses (3.00 hours)</b>		<b>Credit Hours</b>
HIS217	Material Culture of Islamic World	3.00
HIS440	Oral History	3.00
MGMT200	Fundamentals of Management	3.00
MSC235	Principles of the Writing for Media	3.00

## Minor in Tourism

The Minor in Tourism is an 18-credit hour program. It aims to prepare students for advancement in the field of tourism administration, heritage management, travel and tourism, and cultural heritage sectors. On successful completion of the Minor, students should be able to explain the key components and sectors of tourism system and their relationships, and to develop methods, practices and skills of protecting, preserving and displaying tangible and intangible tourism assets.

### Program Objectives

- Preparing students for advancement in the field of tourism administration, heritage management, travel and tourism, and cultural heritage sectors.
- Training students to appreciate and reinforce tourism business with emphasis on the sustainability and promotion of cultural and natural resources in line with the growing demand for the tourism industry.
- Increasing the chances of student employability in tourism sectors.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the key components and sectors of tourism system and their relationships.
- Recognize the significance of history, archaeological findings, cultural and heritage assets in the tourism contexts.
- Develop methods and skills of protecting, preserving and displaying tangible and intangible tourism assets of the UAE, Arab region and Near East.
- Evaluate the contemporary issues and the impacts of tourism on the environment, society, economy and culture at national, regional and international levels.

### Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Tourism**

<b>Core Courses (Students must take these courses) (12.00 hours)</b>		<b>Credit Hours</b>
TOR101	Introduction to Tourism	3.00
TOR263	Tourism Resources in the UAE	3.00
TOR403	Tourism and Society	3.00
HIS381	UAE Architectural Heritage	3.00

<b>Elective Courses (Choose two of the following courses one of which must be at the 300 level or above) (6.00 hours)</b>		<b>Credit Hours</b>
HIS215	Ancient History & Archaeology of Near East	3.00
HIS217	Material Culture of Islamic World	3.00
HIS310	Introduction to Archaeology & Museum Studies	3.00
TOR350	Tourism and the Environment	3.00
GEO461	Geography of Tourism	3.00
MSC452	Public Relations & Advertising Campaigns	3.00

# Department of Linguistics

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## Bachelor of Arts in Linguistics

The BA in Linguistics aims to develop an understanding of the way human languages are structured and educates students in the basic skills that are essential for the analysis of language. This includes knowledge of language structure, sound systems and processes, word and sentence meaning, and contextual interpretation. In addition, given the interdisciplinary nature of linguistics, students may also study language and social communication, the historical development of languages, and how language is processed in the brain. The program curriculum, in addition to the offered minors in Aphasia and Computational Linguistics, is designed to provide training for students interested in working as assistants in communication disorder institutes, government positions, or prepare for graduate study in relevant fields.

### Program Objectives

- To graduate language practitioners with the prerequisite knowledge, values and skills to practice within the multicultural populations of the UAE, the GCC and the global community.
- To equip students with the necessary professional infrastructure to conduct research, disseminate findings, and undertake community service.
- To enhance traditional values of volunteerism, social solidarity, cooperation and mutual aid through real world humanitarian experiences
- To prepare future leaders and entrepreneurs for professional practice and service in a global context.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Define the fields of phonetics, phonology, morphology, syntax, and semantics.
- Discuss raw linguistic data from a variety of naturalistic and experimental sources.
- Interpret linguistic data in the context of existing models of language.
- Analyze language change, especially as it applies to the origin and nature of dialects.
- Categorize complex relationships between language varieties and socio-cultural characteristics such as socioeconomic status, ethnicity, and gender.
- Assess the major phases in the historical and biological development of languages.
- Develop organizational, team work, and leadership skills.
- Demonstrate professional skills and thoughts of ethical, social, integrity and respect for diversity.
- Demonstrate effective communicate skills in written and oral format.
- Develop basic information literacy in general linguistics and allied disciplines.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00

LIT150	Introduction to Literature	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00

ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>2</sup>	3.00
2 : Also counts towards the Major		

### Linguistics Major (Req. CH:39)

<b>Required Courses (30.00 hours)</b>		<b>Credit Hours</b>
LNG100	Introduction to Linguistics	3.00
LNG220	Phonetics	3.00
LNG231	Phonology I	3.00
LNG241	Syntax I	3.00
LNG250	Morphology	3.00
LNG331	Phonology II	3.00
LNG341	Syntax II	3.00
LNG342	Semantics	3.00
LNG480	Field Methods in Linguistics	3.00
LNG490	Senior Capstone	3.00

**Elective Courses (Req. CH:9) Students should take one course from each of the following three groups:-**

<b>Variation and Change (3.00 hours)</b>		<b>Credit Hours</b>
LNG362	Contrastive Linguistics	3.00
LNG370	Historical Linguistics	3.00
LNG410	Sociolinguistics	3.00
LNG415	Current Topics in Language Variation & Change	3.00

<b>Representation, Meaning &amp; Mind (3.00 hours)</b>		<b>Credit Hours</b>
LNG321	Language & Computer Technology	3.00
LNG420	Computational Linguistics	3.00
LNG450	Psycholinguistics	3.00
LNG475	Current Topics in Language Rept Meaning & Mind	3.00
PHI333	Philosophy of Language	3.00

<b>Arabic linguistics (3.00 hours)</b>		<b>Credit Hours</b>
LNG290	Linguistic Structure of Arabic	3.00
LNG390	Arabic Syntax	3.00
LNG470	Current Topics in Arabic Linguistics	3.00
LNG485	Neuroscience of Arabic	3.00

### Minors and Free Electives (Req. CH:42)

<b>Required Minor (1) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Optional Minor (2) (Students can either take Minor (2) or 18 credit hours from any free elective courses.) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Free Electives (6.00 hours)</b>	<b>Credit Hours</b>
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## **Bachelor of Arts in Applied Linguistics (TESOL)**

The BA in Applied Linguistics/TESOL offered by the Department of Linguistics is designed to provide students with relevant substantive, conceptual, theoretical, and methodological tools, necessary to work successfully as English language teachers. Students take a range of courses aimed at developing and enhancing their knowledge and understanding of language teaching, including Introduction to Applied Linguistics, Pedagogical Structure and Second Language Acquisition and Learning. A further important component of the course is the Teaching Practicum, which is designed to provide hands-on practice in using a variety of techniques to manage classroom interactions and enable students to prepare and implement lesson plans and materials. Via collaboration with the Ministry of Education, practicum students are placed at various sites within the UAE. In addition, practicum students gain experience within the University General Requirements Units (UGRU) and the Foundation Program at UAEU.

### **Program Objectives**

- The student will learn to recognize the essential problem-solving nature of the discipline with its principal applications.
- The student will gain the necessary knowledge to Identify key linguistic concepts and models applied to the analysis of a range of spoken and written data.
- The student will be prepared to use basic methods of empirical research to issues in applied linguistics.
- The student will learn how to examine the main methods that are to be taken into account in the language teaching of English as a foreign/second language.
- The student will be prepared to deal with findings from corpus linguistics, sociolinguistics, psychology, pragmatics, discourse analysis and other contributing disciplines in order to enable students to enhance their own use of English.
- The student will be trained to evaluate findings from corpus linguistics, sociolinguistics, psychology, pragmatics, discourse analysis and other contributing disciplines in order to enable students to enhance their own use of English.
- The student will be made aware of what is at stake in the spheres of current employment where linguistic knowledge and skills play a significant part.

### **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Define the problem-solving nature of applied linguistics in relation to the principal applications of the discipline.
- Discuss key linguistic concepts and models applied to the analysis of spoken and written data.
- Apply basic methods of empirical research to studies of issues in applied linguistics.
- Appraise the main linguistic and pedagogic issues taken into account in the learning and teaching of English as a foreign/second language.

- Formulate the ways in which the contributing disciplines of linguistics, sociolinguistics, psychology, pragmatics and discourse analysis can enhance learners' use of English.
- Evaluate data from different branches of applied linguistic research.
- Develop organizational, team work, and leadership skills.
- Demonstrate professional skills and thoughts of ethical, social, integrity and respect for diversity.
- Demonstrate effective communicate skills in written and oral format.
- Develop basic information literacy in applied linguistics and allied disciplines.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**  
**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
HIS133	Introduction to Art History	3.00
LIT150	Introduction to Literature	3.00
TRS200	Introduction to Translation	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>2</sup>	3.00
<sup>2</sup> : Also counts towards the Major		

### TESOL Major (Req. CH:39)

<b>Required Courses (33.00 hours)</b>		<b>Credit Hours</b>
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
TSL100	Introduction to English Grammar	3.00
TSL110	Introduction to Applied Linguistics	3.00
TSL210	English Phonetics	3.00
TSL220	Pedagogical Structure	3.00
TSL321	Secondary Language Acquisition & Teaching	3.00
TSL360	Discourse Analysis	3.00
TSL431	Skills & Strategies	3.00
TSL442	Second Language Methodology	3.00
TSL451	Practicum / Internship	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
LNG231	Phonology I	3.00
LNG241	Syntax I	3.00
LNG342	Semantics	3.00
PHI333	Philosophy of Language <sup>3</sup>	3.00
TSL351	Language Testing-TA-	3.00
TSL421	Practicum: Continuing Professional Development-TA	3.00
3 : Student choose only one of these courses		

### Minors and Free Electives (Req. CH:42)

<b>Required Minor (1) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Optional Minor (2) (Students can either take Minor (2) or 18 credit hours from any free elective courses.) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Free Electives (6.00 hours)</b>	<b>Credit Hours</b>
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# Minor in Aphasia

The Minor in Aphasia is an 18-credit hour program. Its objective is to introduce students to the study of language breakdown in adult speakers, its assessment, and the basic concepts in language disorder treatment. The courses cover elementary brain structures and functions, general notions in communication disorders, and language representation and processing. The Practicum exposes the students to basic skills in clinical settings.

## Program Objectives

- Explain the causes of aphasia.
- Recognize the importance of communication to well-being.
- Examine the role that positive family and supporter involvement plays in recovery.
- Develop a variety of techniques that enhance communication with those who are living with aphasia.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe speech motor control and the effects of brain damage in a variety of neurological disorders focusing on aphasia.
- Explain the communicative features of aphasia within the broader context of neurological disorders and diseases.
- Develop the ability to identify these features.
- Devise data collection and evaluation procedures in aphasia.
- Summarize a range of intervention processes and management approaches in aphasia.
- Apply basic problem solving skills in the clinical treatment of people with aphasia.

## Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Aphasia**

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
BIOL222	Introduction to Cognitive Neuroscience	3.00
LNG450	Psycholinguistics	3.00
LNG460	Linguistic Theory and Aphasia	3.00
LNG455	Practicum-TA-	3.00
PSY314	Sensation and Perception	3.00
SPED222	Language & Communication Disorders	3.00

## Minor in Computational Linguistics

The Minor in Computational Linguistics is an 18-credit hour program. It provides students with insights into the fundamental problems, questions and methods of solution for the fields of Natural language Processing, Computational Linguistics, and Language Technology. The program develops solid programming and software development knowledge in regards to various paradigms of computer programming and in the region of complex linguistic technological problem areas, and an understanding of the foundational formulas of computational linguistics.

### Program Objectives

- gain a theoretically grounded appreciation of contemporary work in Computational Linguistics (CL)/Natural Language Processing (NLP).
- develop practical skills in writing and implementing grammar fragments in mainstream CL/NLP formalisms, and in implementing systems.
- introduce styles of argumentation and evaluation criteria used in CL/NLP research.
- recognize contemporary computationally oriented grammar formalisms and linguistic descriptions using these formalisms.
- develop a critical appreciation of a selection of recent research in NLP.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- introduce different approaches to the study of language adopted in contemporary work in Computational Linguistics (CL)/Natural Language Processing (NLP).
- explore the interface of the study of language and contemporary work in CL/NLP.
- identify key concepts, issues, ideas, theories, techniques styles of argumentation and evaluation criteria used in contemporary CL/NLP.
- demonstrate methods and tools employed in contemporary CL/NLP research in relation to collection, analysis and presentation of data, programming, system development and evaluation.
- illustrate a range of applications that constitute natural language processing and language technology and the issues that arise in constructing natural language processing applications.
- appraise simple natural language processing systems.

## Degree Requirements

Required Credit Hours : minimum 18 hours  
Computational Linguistics

Required Courses (18.00 hours)		Credit Hours
CSBP301	Artificial Intelligence	3.00
ITBP119	Algorithms and Problem Solving	3.00
ITBP219	Object Oriented Programming	3.00
ITBP316	Human Computer Interaction	3.00
ITBP319	Data Structures	3.00
LNG420	Computational Linguistics	3.00

## Minor in Educational Linguistics

The Minor in Educational Linguistics is an 18-credit hour program. Its objective is to introduce students to the main aspects of linguistics as these relate to language education. Courses offered include Introduction to Applied Linguistics, Second Language Acquisition & Teaching, teaching English for Specific Purposes, Teaching Adult Learners, and Language Testing.

### Program Objectives

- to introduce students to central aspects of linguistics as these relate to language education.
- to provide students with an in-depth understanding of theoretical issues in the field of Educational Linguistics.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- explain the nature & scope of Educational Linguistics & the key concepts in the field
- develop the technical vocabulary necessary for discussion of key issues in a range of relevant subfields including Second Language Acquisition, English for Specific Purposes, and Language Testing.
- demonstrate acquaintance with contemporary theoretical approaches employed in a range of relevant subfields including Second Language Acquisition, English for Specific Purposes, and Language Testing.
- distinguish the theoretical principles that underlie the key skills, strategies & techniques required for effective teaching of foreign languages, with particular reference to the teaching of English.

### Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Educational Linguistics**

<b>Required Courses (9.00 hours)</b>		<b>Credit Hours</b>
TSL110	Introduction to Applied Linguistics	3.00
TSL321	Secondary Language Acquisition & Teaching	3.00
TSL431	Skills & Strategies	3.00

<b>Elective Courses (9.00 hours)</b>		<b>Credit Hours</b>
TSL220	Pedagogical Structure	3.00
TSL230	Development of Second Language Literacy	3.00
TSL360	Discourse Analysis	3.00
TSL240	Teaching Adult Learners-TA	3.00
TSL331	Teaching Eng for (ESP)	3.00

TSL351	Language Testing-TA-	3.00
TSL442	Second Language Methodology	3.00
CURR316	Teaching Methods of English for Young Learners	3.00
CURR358	Content and Pedagogy Development of ENGL-EL	3.00

# Minor in Natural Language Processing

The Minor in Natural Language Processing is an 18-credit hour program. It introduces students to approaches to the study of Natural Language Processing and provides them with the knowledge and the tools used in NLP research and its applications in the language industry, including system development, implementation and evaluation.

## Program Objectives

- Gain a theoretically grounded appreciation of contemporary work in Natural Language Processing (NLP).
- Develop practical skills in writing and implementing grammar fragments in mainstream NLP formalisms, and in implementing systems.
- Introduce styles of argumentation and evaluation criteria used in NLP research.
- Recognize contemporary computationally oriented grammar formalisms and linguistic descriptions using these formalisms.
- Develop a critical appreciation of a selection of recent research in NLP.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Introduce different approaches to the study of language adopted in contemporary work in NLP.
- Explore the interface of the study of language and contemporary work in NLP.
- Identify key concepts, issues, ideas, theories, techniques styles of argumentation and evaluation criteria used in contemporary NLP.
- Demonstrate methods and tools employed in contemporary NLP research in relation to collection, analysis and presentation of data, programming, system development and evaluation.
- Illustrate a range of applications that constitute natural language processing and language technology and the issues that arise in constructing natural language processing applications.
- Appraise simple natural language processing systems.

## Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Natural Language Processing**

<b>Required Courses (12.00 hours)</b>		<b>Credit Hours</b>
ITBP119	Algorithms and Problem Solving	3.00
ITBP219	Object Oriented Programming	3.00
ITBP316	Human Computer Interaction	3.00
LNG420	Computational Linguistics	3.00

<b>Elective Option One (3.00 hours)</b>		<b>Credit Hours</b>
LNG280	Linguistic Structure of English	3.00
LNG290	Linguistic Structure of Arabic	3.00

<b>Elective Option Two (3.00 hours)</b>		<b>Credit Hours</b>
LNG231	Phonology I	3.00
LNG241	Syntax I	3.00

# Department of Mass Communication

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## Bachelor of Arts in Mass Communication

The Department of Mass Communication at UAEU is one of the largest academic units within the Faculty of Humanities and Social Sciences in terms of enrollments. The department offers a professionally-oriented program that is committed to producing highly competent graduates who possess the requisite skills to become successful professionals in an increasingly complex media industry, and who are steeped in a broad-based knowledge of society that is acquired through a rich and diverse liberal arts education. The department is further committed to challenging students to become socially responsible citizens whose professional careers are defined by observation of personal and professional ethics derived from society's ideal moral order. The approximately 240 majors in the department pursue courses of study in three of the most common tracks within mass communication programs anywhere - journalism, television broadcasting, and public relations. Students in the program use modern facilities including a state-of-the-art TV studio and two high-tech media creativity labs to enhance their professional skills in broadcasting, video production, and digital editing and layout design. In 2010, the Department developed three proposals for academic minors that were approved at the end of spring 2010 by the university-wide curriculum committee. The three minors are in Leadership & Communication, Journalism, and TV Studies. The minors are available to students in any other discipline at UAEU except mass communication.

### Program Objectives

- To produce graduates who are highly competent professionals and who will be competitive in a technology-driven job market.
- To produce graduates who are capable of independently exploring theories and concepts, understand the history, structure, and economics of media institutions, and appreciate the role of media in shaping culture.
- To produce graduates who understand and appreciate the role of ethical conduct for media professionals and the concomitant respect for societal norms and values in the UAE and the Arab World.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply professional writing requirements for print, broadcast, public relations, and online media. They will also develop competence in the production and operation of convergent media.
- Demonstrate critical thinking abilities as applied to academic as well as professional arenas.
- Acquire independent learning experiences by drawing on a rich and broadly based liberal arts education through research and analysis of social issues and prescribing appropriate solutions to problems.
- Discuss the principles of professional and mass communication ethics and how they inform the work of the media professional in the Arab and Islamic contexts.

- Explain the importance of diverse perspectives in solving societal problems.
- Develop organizational, team work, and leadership skills.
- Communicate effectively in both oral and written forms with various audiences.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**

**General Education (Req CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PUBL421	Press Law and Ethics <sup>1</sup>	3.00
1 : Also counts towards the Major		

<b>Cluster 2: Skills for Life - English Communication (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00
MSC211	Principles of Oral Communication <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>3</sup>	3.00
3 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00

LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00

CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>4</sup>	3.00
4 : Also counts towards the Major		

### Mass Communication Major (Req CH:36)

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
MSC203	Principles of Visual Communication	3.00
MSC235	Principles of the Writing for Media	3.00
MSC370	Communication Theories	3.00
MSC480	Contemporary Issues in Mass Communications	3.00
MSC490	Practicum	6.00

### Track Requirements (Req CH:18)

<b>Students should take one of the following Tracks: (18.00 hours)</b>	<b>Credit Hours</b>
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#### 1: Journalism Track (Req. CH:18)

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
MSC264	News Writing	3.00
MSC356	News Reporting	3.00
MSC390	News Editing (lab)	3.00
MSC396	Communication Research Methods	3.00
MSC401	Computer Assisted Reporting	3.00
MSC450	Newspaper& Magazine Production	3.00

## 2: Public Relations and Advertising Track

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
MSC243	Public Relations & Advertising Principles	3.00
MSC342	Writing for Public Relations	3.00
MSC396	Communication Research Methods	3.00
MSC452	Public Relations & Advertising Campaigns	3.00
MSC462	Designing Media Messages	3.00

## 3: Radio Broadcasting Track

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
MSC316	Broadcast Management	3.00
MSC352	Writing for Broadcast	3.00
MSC396	Communication Research Methods	3.00
MSC420	Radio Production I	3.00
MSC460	Radio Production II	3.00

## 4: Television Broadcasting Track

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
MSC257	Television Production I	3.00
MSC316	Broadcast Management	3.00
MSC352	Writing for Broadcast	3.00
MSC355	Television Production II	3.00
MSC396	Communication Research Methods	3.00

## Elective Courses

<b>Elective Courses for Public Relations and Advertising, Radio Broadcasting and Television Broadcasting Concentrations (3.00 hours)</b>		<b>Credit Hours</b>
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
MSC250	Photojournalism	3.00
MSC381	Translation for Communication	3.00
MSC391	Communication in Modern Societies	3.00

MSC411	Case Studies in Public Relations	3.00
MSC412	Public Opinion	3.00
MSC422	Organizational Communication	3.00

**Minors and Free Electives (Req. CH:45)**

<b>Required Minor (1) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Optional Minor (2) (Students can either take Minor (2) or 18 credit hours from any free elective courses.) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Free Electives (9.00 hours)</b>	<b>Credit Hours</b>
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## Minor in Television Studies

The TV minor program that focused on TV studies and digital production is designed to prepare students the fundamentals in researching, writing, directing, producing, and managing broadcast media programs. The successful graduate will demonstrate a basic knowledge of historical, legal and ethical issues, competency in TV research, proficiency in writing a variety of TV programs and the effective use of equipment and technologies for entering the industry.

### Program Objectives

- Acquire a theoretical, historical, conceptual and critical understanding of TV industry.
- Demonstrate effective use of equipment and technologies appropriate to the entry level of professional practice.
- Demonstrate writing proficiency appropriate to the entry level of professional practice.
- Apply critical thinking, research, management and analysis in TV programs and production as well as accomplish professional goals.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate a basic knowledge of historical, legal, and ethical issues.
- Demonstrate competency in TV research and management skills.
- Apply effectively appropriate concepts and theories of the electronic media.
- Apply critical thinking, research, and analysis to accomplish professional and personal goals.
- Demonstrate skills and knowledge for entry into professional practice.
- Demonstrate writing proficiency appropriate to the entry level of professional practice.
- Demonstrate effective use of equipment and technologies appropriate to the entry level of professional practice.

### Degree Requirements

**Required Credit Hours : minimum 18 hours**

#### Television Studies

Required Courses (12.00 hours)		Credit Hours
MSC203	Principles of Visual Communication <sup>1</sup>	3.00
MSC257	Television Production I	3.00
MSC352	Writing for Broadcast	3.00
MSC485	Practicum in Digital Production	3.00

<sup>1</sup> : Students on the PR or Journalism Studies tracks of the Mass Communication Program take MSC 200 instead

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
MSC250	Photojournalism	3.00
MSC316	Broadcast Management <sup>2</sup>	3.00
MSC355	Television Production II	3.00
MSC396	Communication Research Methods <sup>3</sup>	3.00
MSC462	Designing Media Messages	3.00
<sup>2</sup> : Students in PR Track of Mass Communication should take these two courses only		
<sup>3</sup> : Not for students of Mass Communication		

## Minor in Journalism

The minor in journalism prepares students basic journalism skills in producing and presenting news projects, e.g. writing news stories, producing print, digital, and online journalistic works. It is an 18-credit hours program that cover core courses in news writing, news editing, news reporting as well as elective course to prepare the proficiency in information and data gathering, media law and ethics, audience effects research, media literacy and media critics. Its main objectives are to equip students with competency for successful careers in journalism, public relations and related areas.

### Program Objectives

- To provide students basic insight and understanding of principles and procedures in gathering, reporting and writing news and feature articles.
- To develop proficiency and skill in the areas of content production for diverse and converged news media platforms.
- To develop students' competence and ability in news judgment as well as awareness of the legal and ethical issues confronting the working journalist of today.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate competency in journalistic writing and proficiency in various news writing styles.
- Demonstrate basic skill in the craft of non-fiction writing.
- Know interviewing skills and other information gathering skills as well as integration of source information, data and spread sheets into news stories.
- Demonstrate understanding of basic audience effects theories and be media literate.
- Apply the journalism skills to the production and presentation of journalistic projects. (producing newsletters, news stories, Web or print magazine pieces or other journalistic works).
- Demonstrate basic skills in media analysis, including being able to critique a mass media product byusing knowledge from border disciplines.

### Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Journalism**

Required Courses (12.00 hours)		Credit Hours
MSC235	Principles of the Writing for Media	3.00
MSC264	News Writing	3.00
MSC356	News Reporting	3.00
MSC390	News Editing (lab)	3.00

**Elective Courses: Students must chose two of these courses:  
(6.00 hours)**

**Credit Hours**

MSC342	Writing for Public Relations	3.00
MSC396	Communication Research Methods	3.00
MSC401	Computer Assisted Reporting	3.00
MSC450	Newspaper& Magazine Production	3.00
PUBL421	Press Law and Ethics	3.00

## **Minor in Leadership and Communication**

The ability to communicate effectively is a critical asset for leaders in today's competitive and well-connected world. The minor in leadership and communication is an interdisciplinary program that covers a wide range of courses including communication, marketing, management, public administration and social psychology. It provides students communication skills, marketing and managing strategies, leadership concepts and competency that are needed to prepare future leaders and decision makers in the UAE society and beyond.

### **Program Objectives**

- Demonstrate the ability to effectively apply communication skills and techniques in various communication settings and collaborative teamwork.
- Demonstrate competency in research, writing, presentation and management skills that are required in the various components of leadership and society.
- Demonstrate competency in criticizing societal issues and propose effective solutions using psychological principles and management and communication skills.
- Provide students with strategies to handle the challenges associated with new and increasingly more complex leadership roles.

### **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Describe basic concepts and theories related to the study of communication, management and leadership.
- Analyze the complex inter-relationship among the various components of leadership and society and key concepts associated with each.
- Use the language and vocabulary of marketing to create a simple marketing plan and apply marketing concepts to the successful running of an enterprise.
- Apply the basics of effective communication and have ample opportunity to practice and improve students' communication skills.
- Demonstrate competency in research, writing, presentation and Management skills.
- Criticize UAE societal issues and propose effective solutions using psychological principles and management and communication skills.
- Apply some leadership's theories in practice within the UAE society.
- Apply decision making skills to issues related to UAE society.

## Degree Requirements

Required Credit Hours : minimum 18 hours  
Leadership and Communication

<b>Required Courses (12.00 hours)</b>		<b>Credit Hours</b>
PSG130	Introduction to Public Administration	3.00
PSY205	Social Psychology	3.00
MKTG200	Principles of Marketing	3.00
MSC211	Principles of Oral Communication	3.00

<b>Elective Option One Students must choose one of these two courses: (3.00 hours)</b>		<b>Credit Hours</b>
MSC316	Broadcast Management	3.00
MSC422	Organizational Communication	3.00

<b>Elective Option Two Students must choose one of these two courses: (3.00 hours)</b>		<b>Credit Hours</b>
MSC270	Writing for the Media	3.00
MSC435	Intensive Research/Writing	3.00

# Department of Philosophy

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## Bachelor of Arts in Philosophy

Philosophy trains students in critical thinking, ethical evaluation, logical analysis and conceptual creativity and develops high-level skills in reading, writing and verbal communication. The Philosophy Major is divided into three tracks: General, which comprises logic, history of philosophy, value theory, metaphysics and epistemology; Citizenship and Civil Society, which comprises political theory, ethics, concepts of civil society and the nature of citizenship; and Philosophy of Sustainable Management of Natural Resources, which critically examines environmental ethics and theory of nature.

### Program Objectives

- To enable students to understand the nature of rational argument.
- To equip students with the skills to construct relevant, appropriate, rational arguments.
- To provide students with the skills to apply knowledge acquired in the program to new situations
- To imbue students with a sense of ethics and equip them with the theoretical tools to understand and apply ethics.
- To equip students with the necessary skills to undertake independent research.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the logical meaning of speech or text.
- Construct rational and insightful argumentation that supports conclusions regarding concepts, theories and issues.
- Critically compare alternative perspectives on a given problem.
- Describe and resolve theoretical and practical philosophical problems and apply theory to specific cases.
- Apply ethical values, both individually and in collaboration with others.
- Use high levels of information literacy through independent research.
- Discuss the history of philosophy, through the knowledge of some of its major figures, themes and methodologies.
- Communicate effectively in both oral and written form to various audiences.
- Use preparedness for continued reflective practice and lifelong learning.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI310	Ethics <sup>1</sup>	3.00
1 : Also counts towards the Major		

<b>Cluster 2: Skills for Life - English Communication (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>2</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
2 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00

MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00

GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>3</sup>	3.00
3 : Also counts towards the Major		

### Philosophy Major (Req. CH:15)

<b>Required Courses (15.00 hours)</b>		<b>Credit Hours</b>
PHI200	Logic	3.00
PHI211	Ancient Philosophy	3.00
PHI212	Modern Philosophy	3.00
PHI411	Senior Capstone	3.00
PHI322	Epistemology	3.00
PHI332	Metaphysics	3.00

### Track Requirements

<b>Choose one track from the following (18.00 hours)</b>	<b>Credit Hours</b>
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#### (1) General Philosophy Track (Req CH:18)

<b>Historical Electives (3.00 hours)</b>		<b>Credit Hours</b>
PHI311	Medieval	3.00
PHI331	Philosophical Problems	3.00
PHI362	Islamic Philosophy	3.00
PHI432	Contemporary Western Philosophy	3.00
PHI442	Modern Arabic Thought	3.00

<b>Internship Requirement (3.00 hours)</b>		<b>Credit Hours</b>
PHI412	Internship	3.00

<b>Value Theory Electives - At least 3 Ch at the 300 or 400 level (6.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00

PHI122	International Ethics	3.00
PHI224	Medical Ethics	3.00
PHI225	Citizenship & Civil Society	3.00
PHI226	Human Rights Theory	3.00
PHI231	Aesthetics	3.00
PHI312	Political & Social Philosophy	3.00
PHI314	Contemporary Islamic Political Philosophy	3.00
PHI320	Ethics in Business Governance	3.00
PHI331	Philosophical Problems	3.00
PHI421	Advanced Topics in Ethics	3.00
PHI461	Sustainability & Environmental Ethics	3.00

<b>Theoretical Electives - At least 3 CH at the 400 Level (6.00 hours)</b>		<b>Credit Hours</b>
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
PHI315	Technology and Culture	3.00
PHI323	Philosophy of Mind	3.00
PHI331	Philosophical Problems	3.00
PHI333	Philosophy of Language	3.00
PHI360	Philosophy of Nature	3.00
PHI440	Cognitive Science	3.00

**(2) Citizenship and Civil Society Track (Req. CH:18)**

<b>Political Theory Required Courses (9.00 hours)</b>		<b>Credit Hours</b>
PHI225	Citizenship & Civil Society	3.00
PHI314	Contemporary Islamic Political Philosophy	3.00
PHI312	Political & Social Philosophy	3.00
PHI360	Philosophy of Nature	3.00

<b>Specialization Requirement (6.00 hours)</b>		<b>Credit Hours</b>
PHI122	International Ethics	3.00
PHI224	Medical Ethics	3.00
PHI226	Human Rights Theory	3.00
PHI270	Philosophy of Education	3.00
PHI421	Advanced Topics in Ethics	3.00
PHI461	Sustainability & Environmental Ethics	3.00

PSG120	Government & Politics of UAE	3.00
PSG270	Comparative Political Systems	3.00

<b>Internship Requirement (3.00 hours)</b>		<b>Credit Hours</b>
PHI412	Internship	3.00

### (3) Philosophy of Sustainable Management of Natural Resources Track (Req. CH:18)

<b>Required Courses (9.00 hours)</b>		<b>Credit Hours</b>
PHI315	Technology and Culture	3.00
PHI360	Philosophy of Nature	3.00
PHI461	Sustainability & Environmental Ethics	3.00

<b>Political Electives (3.00 hours)</b>		<b>Credit Hours</b>
PHI312	Political & Social Philosophy	3.00
PHI320	Ethics in Business Governance	3.00

<b>Geographical Usage Electives (3.00 hours)</b>		<b>Credit Hours</b>
GEO402	Land Use	3.00
GEO462	Current Environmental Issues	3.00

<b>Geographical Politics Electives (3.00 hours)</b>		<b>Credit Hours</b>
BIOC494i	Issues in Environmental Impact	3.00
GEO471	Political Geography	3.00

### Minors and Free Electives (Req. CH:48)

<b>Required Minor (1) (18.00 hours)</b>		<b>Credit Hours</b>
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<b>Optional Minor (2) (Students can either take Minor (2) or 18 credit hours from any free elective courses.) (18.00 hours)</b>		<b>Credit Hours</b>
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<b>Free Electives (12.00 hours)</b>		<b>Credit Hours</b>
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# Minor in Citizenship

The Minor in Citizenship critically evaluates historical and contemporary theories and applications of citizenship. It critically evaluates significant political theories, the role of government and the rights and duties of citizens. It investigates the roles of technology, culture and education in shaping the lives of citizens. It investigates the government structures and the role of the citizen locally and internationally.

## Program Objectives

- To understanding citizenship, government and political thought.
- To provide students with skills in conceptual analysis, logical argumentation and written and verbal communication.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Critically evaluate historical and contemporary theories and applications of citizenship.
- Critically evaluate central political theories defining the role of government and the rights and duties of citizens.
- Critically understand how technology, culture, information and education shape their lives as citizens.
- Demonstrate an understanding of their own governmental structures and how the concept of citizenship is applied in the UAE.
- Demonstrate an understanding of how citizenship is understood internationally and gain a critical awareness of how citizenship is understood and applied in other cultures

## Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Citizenship**

<b>Required Courses (9.00 hours)</b>		<b>Credit Hours</b>
PHI225	Citizenship & Civil Society	3.00
PHI226	Human Rights Theory	3.00
PSG120	Government & Politics of UAE	3.00

<b>Elective Option One (3.00 hours)</b>		<b>Credit Hours</b>
PHI314	Contemporary Islamic Political Philosophy	3.00
PSG261	Political Thought	3.00

<b>Elective Option Two (6.00 hours)</b>		<b>Credit Hours</b>
PHI314	Contemporary Islamic Political Philosophy	3.00

PHI315	Technology and Culture	3.00
PHI320	Ethics in Business Governance	3.00
PHI270	Philosophy of Education	3.00
SOC314	Political Sociology	3.00

# Minor in Cognitive Science

The Minor in Cognitive Science is an interdisciplinary investigation of mental functions and intelligent systems through the intersecting disciplines of philosophy, psychology, linguistics, biology, and Information Technology. It offers a primary specialization in one of the component disciplines and a secondary specialization in another one of the composite disciplines. It investigates key concepts and models regarding memory, decision-making, perception, action control, emotion and other mental functions and provides methods for studying both natural and artificial intelligence systems.

## Program Objectives

- to provide students with knowledge of mental functions and intelligent systems, through the intersecting disciplines of philosophy, psychology, linguistics, biology, and Information Technology.
- to provide students with skills in conceptual analysis, logical argumentation, and written and verbal communication.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of some foundational concepts, theories, and methods necessary to the study of both natural and artificial intelligent systems.
- Apply key concepts and models to philosophical and scientific issues regarding the systems underlying learning, memory, decision-making, perception, action control, emotion, and other mental functions.
- Construct rational arguments to support conclusions regarding explanatory models about mental functions and intelligent systems.
- Critically appraise various conflicting perspectives and compare classical and current theories within and across the various disciplines that comprise cognitive science.
- Critically assess both quantitative and qualitative methodologies for acquiring data and developing models in the cognitive sciences.

## Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Cognitive Science: Primary Specializations**

Required Courses for non Psychology Majors (12.00 hours)		Credit Hours
PSY202	Biopsychology	3.00
PSY305	Cognitive Psychology	3.00
PSY417	Neuropsychology	3.00
PHI440	Cognitive Science	3.00

<b>Required Courses for non Philosophy Majors (12.00 hours)</b>		<b>Credit Hours</b>
PHI200	Logic	3.00
PHI322	Epistemology	3.00
PHI323	Philosophy of Mind	3.00
PHI440	Cognitive Science	3.00

<b>Required Courses for non Linguistics Majors (12.00 hours)</b>		<b>Credit Hours</b>
LNG241	Syntax I	3.00
LNG450	Psycholinguistics	3.00
LNG460	Linguistic Theory and Aphasia	3.00
PHI440	Cognitive Science	3.00

<b>Required Courses for non IT Majors (12.00 hours)</b>		<b>Credit Hours</b>
ITBP119	Algorithms and Problem Solving	3.00
ITBP219	Object Oriented Programming	3.00
ITBP316	Human Computer Interaction	3.00
PHI440	Cognitive Science	3.00

<b>Required Courses for non Biology Majors (12.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
BIOL222	Introduction to Cognitive Neuroscience	3.00
BIOE457	Animal Behavior	3.00
PHI440	Cognitive Science	3.00

### Secondary Specialization Courses

<b>Students must select two courses from a different specialization stream used as the Primary Specialiation (6.00 hours)</b>	<b>Credit Hours</b>
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# Department of Political Science

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## Bachelor of Arts in Political Science

The Department of Political Science offers B.A. in political science. Students can choose to concentrate their studies in international politics and political systems or in public policy and administration. The structure of the Political Science curriculum provides students with the theory and practice that enables them to explore the sub-divisions of the discipline: political thought, comparative politics, international relations, and public policy. The department offers students quality education that provides them with the required knowledge and skills to lead them to exciting careers in federal and local governments, research centers, international organizations, and media. The faculty in the department are active in scholarly research and publications, and are also dedicated to teaching.

### Program Objectives

Provide students with essential concepts and principles in the various subfields of Political Science.

Introduce students to various theories and approaches to the study of politics.

Provide students with solid knowledge about factors that influence international relations and public policy.

Examine the nature and implications of the interactive relationships between domestic and international factors shaping political phenomena.

Equip students with competencies necessary for successful careers in politics and related areas.

Foster responsible citizenship.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Define basic political science concepts.
- Explicate major theories of various subfields of political science.
- Identify essential political processes, institutions, actors, behaviors, and ideas that shape national and international contexts.
- Demonstrate ethical reasoning in relation to political science issues
- Employ qualitative and quantitative research methods in political science analysis.
- Analyze public policy issues both independently and in a team
- Communicate descriptive and analytical knowledge effectively in written and oral format to various audiences
- Discuss the political and administrative systems of the UAE, as well as its developmental achievements
- Demonstrate preparedness for continued reflective practice and lifelong learning.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00

LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
PSG270	Comparative Political Systems <sup>2</sup>	3.00
<i>2 : Also counts towards the Major</i>		

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00

PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>3</sup>	3.00
3 : Also counts towards the Major		

### Political Science Major (Req. CH:39)

<b>Required Courses (21.00 hours)</b>		<b>Credit Hours</b>
PSG110	Fundamentals of Political Science	3.00
PSG120	Government & Politics of UAE	3.00
PSG242	Methods of Research in PSG	3.00
PSG250	Principles of International Relations	3.00
PSG261	Political Thought	3.00
PSG430	Special Topics	3.00
PSG440	Internship	3.00

### Concentration Requirements (Req CH:18)

<b>Students should take one of the following concentrations: (18.00 hours)</b>	<b>Credit Hours</b>
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#### 1: International Politics and Political Systems Concentration (Req. CH:18)

<b>Required Courses (12.00 hours)</b>		<b>Credit Hours</b>
ECON105	Principles of Microeconomics	3.00
PSG301	International Organizations	3.00
PSG315	International Political Economy	3.00
PSG422	Foreign Policy of Great Powers	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
PSG302	Diplomatic Systems	3.00
PSG312	Foreign Policy of Arab States	3.00
PSG321	Gulf & Arabic Peninsula Affairs	3.00
PSG332	Europe & The United States	3.00
PUBL207	Public International Law	3.00

## 2: Government, Policy and Administration Concentration (Req. CH:18)

<b>Required Courses (12.00 hours)</b>		<b>Credit Hours</b>
ECON105	Principles of Microeconomics	3.00
PSG130	Introduction to Public Administration	3.00
PSG331	Local Governments & Local Administrations	3.00
PSG425	Public Policy	3.00

<b>Elective (6.00 hours)</b>		<b>Credit Hours</b>
HRMD320	Human Resources Management	3.00
MSC412	Public Opinion	3.00
PSG352	Governmental Budgeting	3.00
PUBL206	Administrative Law	3.00
SOC314	Political Sociology	3.00

## Minors and Free Electives (Req. CH:42)

<b>Required Minor (1) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Optional Minor (2) (Students can either take Minor (2) or 18 credit hours from any free elective courses.) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Free Electives (6.00 hours)</b>	<b>Credit Hours</b>
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## Minor in Political Science

The Minor in Political Science is an eighteen credit-hour academic program. It includes the core courses in Political Science. Its main objectives are to provide students with the essential concepts, principles, and theories in the various subfields of Political Science, and to equip them with some skills and competencies necessary for successful careers in politics and related areas.

### Program Objectives

- Provide students with essential concepts and principles in the various subfields of political science.
- Introduce students to various theories and approaches to the study of politics.
- Provide students with solid knowledge about factors that influence international relations and public policy.
- Equip students with competencies necessary for successful careers in politics and related areas.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Define the main concepts of political science.
- Identify essential political processes, institutions, actors, behaviors, and ideas that shape national and international contexts.
- Explicate major theories of various subfields of political science.
- Apply theories to analyze political phenomena
- Demonstrate an understanding of the political and administrative systems of the UAE.

### Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Political Science**

<b>Required Courses (9.00 hours)</b>		<b>Credit Hours</b>
PSG110	Fundamentals of Political Science	3.00
PSG120	Government & Politics of UAE	3.00
PSG130	Introduction to Public Administration	3.00

<b>Elective Courses Students must choose three of these courses: (9.00 hours)</b>		<b>Credit Hours</b>
PSG250	Principles of International Relations	3.00
PSG270	Comparative Political Systems	3.00
PSG315	International Political Economy	3.00
PSG321	Gulf & Arabic Peninsula Affairs	3.00
PSG415	Public Governance	3.00
PSG425	Public Policy	3.00

# Department of Psychology and Counselling

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## Bachelor of Arts in Psychology

The Department of psychology & Counseling offers a BA in Psychology which provides students with the knowledge base in psychology, trains them on scientific inquiry and critical thinking skills, prepares them to consider the ethical and social responsibility in a diverse world, develops their communication skills, and provide them with adequate professional development so they are able to apply psychological knowledge and skills in a variety of settings. The program does not include tracks, as its focus is general enough to enable students to pursue various possible psychology graduate programs. The program covers the foundation courses in psychology; namely: Introduction to Psychology, Statistics, Research Methods, Developmental, Social, Cognitive, Experimental, Biopsychology, Psychological Measurements, Abnormal, and Clinical Psychology. The program also offers courses that focus on the psychological applications in the fields of education, industry, and health.

### Program Objectives

- To provide students with knowledge of basic concepts, theoretical perspectives, and current and historical trends psychology.
- To train students to apply critical/creative thinking as well as scientific research skills.
- To train students to provide basic psychological services under supervision.
- To prepare students to apply ethical and social responsibilities in their work as well as research.
- To provide students with necessary skills to communicate effectively with diverse individuals/ groups and situations.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe key concepts, principles, and main themes in psychology.
- Apply scientific reasoning to interpret psychological phenomena.
- Conduct basic psychological research individually and in teams.
- Apply updated ethical standards to evaluate psychological science and practice.
- Demonstrate effective writing and presenting skills for different purposes.
- Analyze psychological information and data using variety of sources and statistical software.
- Communicate efficiently psychological reports and information to concerned parties.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00

LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

STAT180	Psychological Statistics I <sup>2</sup>	3.00
2 : Also counts towards the Major		

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00

BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>3</sup>	3.00
3 : Also counts towards the Major		

### Psychology Major (Req. CH:45)

<b>Required Courses (36.00 hours)</b>		<b>Credit Hours</b>
PSY100	Introduction to Psychology	3.00
PSY201	Research Methods in Psychology	3.00
PSY202	Biopsychology	3.00
PSY205	Social Psychology	3.00
PSY303	Psychological Tests & Measurements	3.00
PSY304	Developmental Psychology	3.00
PSY305	Cognitive Psychology	3.00
PSY306	Abnormal Psychology	3.00
PSY401	Clinical Psychology	3.00
PSY403	Experimental Psychology	3.00
PSY452	Practicum	6.00
PSY454	Research Project/Internship	6.00

<b>Elective Courses - At least two must be PSY 4XX level (9.00 hours)</b>		<b>Credit Hours</b>
PSY312	Psychology of Learning	3.00
PSY313	Educational Psychology	3.00
PSY314	Sensation and Perception	3.00
PSY315	Industrial Organizational Psychology	3.00
PSY316	School Psychology	3.00
PSY317	Psychology of Personality	3.00
PSY413	Counseling Psychology	3.00

PSY414	Introduction to Health Psychology	3.00
PSY416	Differential Psychology	3.00
PSY417	Neuropsychology	3.00
PSY419	Seminar in Psychology	3.00
STAT280	Psychological Statistics II	3.00

**Minors and Electives (Req. CH:36)**

<b>Required Minor (18.00 hours)</b>	<b>Credit Hours</b>
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**Optional Minor (Students can either take Minor (2) or 18 credit hours from any free elective courses.**

<b>Minor (2) (18.00 hours)</b>	<b>Credit Hours</b>
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# Department of Social Work

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## Bachelor of Social Work

The Bachelor of Social Work (BSW) at The Department of Social Work is a professional degree in compliance with Global Standards of the international Association of Schools of Social Work (IASSW). The program aims to educate, train and prepare culturally competent generalist social work practitioners that promote social change and problem solving on the Micro, Mezzo, and Macro levels. The BSW program is conceptualized along Islamic principles of social solidarity, cooperation and mutual aid within an ecological/strengths perspective with a focus on the traditional Arab/Muslim family and the multicultural expatriate populations.

### Program Objectives

- To graduate entry level BSW practitioners that have acquired the knowledge, values, skills to practice with the multicultural populations of the UAE, the GCC and the global community.
- To prepare students for professional practice, to conduct research/dissemination of findings, and for community service.
- To enhance traditional values of volunteerism, social solidarity, cooperation and mutual aid through real world humanitarian experiences.
- To prepare today's leader for professional practice and service in furthering a worldwide humanitarian and social development agenda to improve individual, children, family, groups and community's quality of life.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply theoretical knowledge gained in human behavior & social environment, social work practice, social policy and research courses to generalist social work practice.
- Present orally and in writing the results of using the problem solving method to case scenarios based on real life situations.
- Conduct bio-psycho-social assessments, needs assessments, planning, and evaluation in relation to generalist social work practice.
- Apply social work generalist practice theory and skills with individuals, families, groups, communities and organizational leadership in practice exercises and field practicum settings.
- Apply critical thinking in their interventions with individuals, families, groups, organizations, and communities in their field practicum settings.
- Communicate orally and in writing a research study including data analysis and the use of SPSS.
- Apply a research-based case study on an issue and/or problem encountered in the field.

- Model the professional and ethical behavior expected of entry-level social work professionals, including the use of supervision for accountability and improvement of practice.
- Develop self-awareness and learning practice strategies through self-study via readings, practice experiences and reflection.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**  
**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
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ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### **Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)**

**Credit Hours**

AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00

### **Cluster 3: The Human Community - The Global Experience (3.00 hours)**

**Credit Hours**

AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

### **Cluster 4: The Natural World - Mathematics (3.00 hours)**

**Credit Hours**

STAT101	Statistics in the Modern World	3.00
MATH120	Contemporary Applications of Math	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>2</sup>	3.00
2 : Also counts towards the Major		

### Social Work Major

<b>Required Courses (63.00 hours)</b>		<b>Credit Hours</b>
SWK200	Introduction to Social Welfare	3.00
SWK210	Introduction to Humanitarian Social Work	3.00
SWK220	Social Policy & Services	3.00
SWK230	Human Behavior in Social Environments	3.00
SWK240	Social Work Research Methods	4.00
SWK250	Social Work Practice I: Individuals	3.00
SWK251	Social Work Practice I: Skills	1.00
SWK320	Social Policy Research	3.00
SWK350	Social Work Practice II: Families	3.00
SWK351	Social Work Practice II: Skills	1.00
SWK355	Social Work Leadership	3.00
SWK360	Social Work Practice III	3.00
SWK361	Social Work Practice III: Skills	1.00
SWK375	Social Work & Mental Health	3.00
SWK376	Social Work and Special Populations	3.00
SWK380	Social Work & Islam	3.00
SWK385	Social Work & Substance Abuse	3.00
SWK465	Social Work Practicum I	4.00

SWK466	Field Seminar	3.00
SWK470	Field Practicum II	4.00
SWK499	Special Topics In Social Work	3.00
SWK365	Social Work & Humanitarian Relief	3.00

<b>Required Minor (18.00 hours)</b>	<b>Credit Hours</b>
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# Department of Sociology

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## Bachelor of Arts in Sociology

The Department of Sociology offers B.A. degree in Sociology and a minor in Family Studies. Students require 120 credit hours to graduate. They can choose to concentrate their studies in one of three tracks: Development and Organizational Change, Applied Social Issues and Anthropology and Folklore. Sociology Department aims to prepare leading graduates in the field of sociology as well as to achieve academic excellence. It provides significant approaches through a spectrum of descriptive and analytical methods explicating global operations impacting localized realities represented in detailed case studies, narratives, life histories, discursive and non-discursive actions. These scholarly approaches help appreciate and understand the aspirations and challenges characterizing social life in the UAE.

### Program Objectives

- To introduce students to sociological Knowledge, methods, concepts, issues and topics that are relevant to the society.
- To provide students with skills and tools needed to engage fieldwork and scientific research in the U.A.E society.
- To train students to think critically in understanding, analyzing, and solving the social issues and problems.
- To enrich students' imagination to understand social behaviors, actions, interactions, problems and policies.
- To equip students with tools and skills to serve in government, private, and nonprofit organizations and institutions.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Undertake a preliminary investigation of sociologically informed questions.
- Summarize the findings of empirical sociological research including the ability to identify the methodological framework used.
- Apply basic research tools in a preliminary way.
- Recognize sociologically informed explanations.
- Recognize the ethical dimensions of social research.
- Identify and select from appropriate sociological sources and present the conclusion in an appropriate sociological format.
- Identify and select sociological work relevant to given social, public and civic policies.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (REQ. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00

LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
SOC201	Social & Cultural Change <sup>2</sup>	3.00
<i>2 : Also counts towards the Major</i>		

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00

PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>3</sup>	3.00
3 : Also counts towards the Major		

### Sociology Major (Req. CH:33)

<b>Required Courses (21.00 hours)</b>		<b>Credit Hours</b>
SOC101	Introduction to Sociology	3.00
SOC102	Social Theories	3.00
SOC200	Social Research Methods	3.00
SOC202	Social Problems	3.00
SOC324	Applied Sociology	3.00
SOC403	Research Project	3.00
SOC404	Internship	3.00

**Elective Concentrations (Req. CH:12) Student must choose CH:12 from one of the following concentration including at least one research method course (\*)**

<b>Development and Organizational Change (12.00 hours)</b>		<b>Credit Hours</b>
SOC301	Sociology of Development	3.00
SOC302	Urban Sociology	3.00
SOC303	Bedouin & Rural Society	3.00
SOC304	Demography	3.00
SOC305	Industrial Sociology	3.00
SOC306	Population & Environment	3.00
SOC307	Human Development	3.00
SOC308	Migration Studies	3.00
SOC405	Assessment of Social Projects	3.00

<b>Applied Social Issues (12.00 hours)</b>		<b>Credit Hours</b>
SOC306	Population & Environment	3.00
SOC309	Sociology of Organizations	3.00
SOC313	Sociology of Family	3.00
SOC314	Political Sociology	3.00

SOC315	Sociology of Education	3.00
SOC318	Crime & Juvenile Delinquency	3.00
SOC325	Sociology of Aging	3.00
STAT2152	Social Statistics (1)	3.00
SOC405	Assessment of Social Projects	3.00

<b>Anthropology and Folklore (12.00 hours)</b>		<b>Credit Hours</b>
SOC260	Folklore	3.00
HIS310	Introduction to Archaeology & Museum Studies	3.00
SOC316	Folklore in UAE Society	3.00
SOC317	Social & Cultural Anthropology	3.00
SOC319	Anthropology	3.00
HIS332	Ancient History & Archaeology Arabian of the Peninsula	3.00
HIS372	Arch. of UAE & A. Gulf States	3.00
SOC407	Research Methods in Anthropology & Folklore	3.00

#### Minors and Free Electives (Req. CH:48)

<b>Required Minor (1) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Optional Minor (2) (Students can either take Minor (2) or 18 credit hours from any free elective courses.) (18.00 hours)</b>	<b>Credit Hours</b>
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<b>Free Electives (12.00 hours)</b>	<b>Credit Hours</b>
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## Minor in Family Studies

Family is the most important social institution. Healthy and happy families tend to produce persons who are able to enjoy their own lives and to contribute meaningfully to society. In today's culture, however, families struggle to sustain life-long commitments. The main rationale of this minor is to provide students with knowledge and skills that produce social researchers and practitioners, who are prepared for a career working with people—young and old; men and women; children, teenagers and adults. A focus of this minor is on the development of the individual in a family context throughout the life cycle.

### Program Objectives

- Explain important concepts, theories, and approaches related to the family studies.
- Describe different settings of marriage, family patterns and family interactions.
- Provide research methods skills used in the analysis of the family studies.
- Evaluate various research efforts in the area of the family studies.
- Apply family theories, perspectives, and approaches to everyday life experiences.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Understand the various concepts, theories and approaches related to family studies.
- Identify the various contexts of marriage, family patterns and family interactions.
- Demonstrate skills pertinent to conducting research in the field of family studies.
- Evaluate research efforts in the area of family studies.
- Apply family science knowledge to real-life issues that emerge in practice.

### Degree Requirements

**Required Credit Hours : minimum 18 hours**

#### Family Studies

Required Courses (12.00 hours)		Credit Hours
SOC101	Introduction to Sociology	3.00
SOC202	Social Problems	3.00
SOC313	Sociology of Family	3.00
CURR314	Family, Community, Culture & ECE	3.00

Elective courses (6.00 hours)		Credit Hours
SOC307	Human Development	3.00
SOC315	Sociology of Education	3.00
SOC318	Crime & Juvenile Delinquency	3.00
HSC300	Introduction to Human Services & Counseling	3.00

# Department of Translation Studies

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## Bachelor of Arts in Translation Studies

The program responds to a growing demand for professional translators well-equipped with linguistic and cultural knowledge to meet the needs of the multinational society of the UAE. The program is designed to provide theoretical and practical training for students to become professional translators, and to introduce them to the requirements of specialized translation. The curriculum ensures students will have the required linguistic fluency and familiarizes them with problems they may face in English-into-Arabic and Arabic-into-English translation. It also introduces them to different ways of solving those problems in light of textual and extra-textual factors that may affect their choices. The curriculum includes various specialized courses such as legal, scientific, media, and business translation, as well as community interpreting. It also offers internship opportunities for students to train in different institutions around the UAE.

### Program Objectives

- Develop students' translation-oriented written and oral proficiency in Arabic and English.
- Familiarize students with the theoretical aspects of translation and interpreting.
- Develop students' skills in translating and interpreting texts of different types from English into Arabic and vice versa.
- Produce translators with market-oriented skills and ethics.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate translation-related reading and writing skills in English and Arabic.
- Analyze the contrastive differences between English and Arabic at linguistic and cultural levels.
- Explain theoretical concepts of translation.
- Perform translation-oriented text analysis.
- Produce acceptable translations of different text types using different translation techniques.
- Revise translations as per quality parameters, i.e. accuracy of meaning, clarity of language and effectiveness of message.
- Conduct basic interpreting and sight translation tasks between English and Arabic in different job contexts, such as interpreting in court, hospital, police station and school.
- Demonstrate ethical reasoning in relation to translation issues.
- Work effectively both independently and within a translation team.
- Demonstrate preparedness for continued reflective practice of translation and lifelong learning.
- Conduct translation-related research projects using appropriate research methods and ethical procedures.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication (6.00 hours)</b>		<b>Credit Hours</b>
ESPU1014	Introduction to Academic English for Humanities and SS	3.00
ENG300	Critical Reading in the Disciplines <sup>1</sup>	3.00
1 : Also counts towards the Major		

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>2</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
2 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00

LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00

CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
HSR400	Integrated Capstone <sup>3</sup>	3.00
3 : Also counts towards the Major		

### Translation Studies Major (Req. CH:36)

<b>Required Courses (27.00 hours)</b>		<b>Credit Hours</b>
ENG250	English Grammar & Usage	3.00
ENG310	Writing for Research	3.00
ENG450	Public Speaking and Debate	3.00
TRS200	Introduction to Translation	3.00
TRS350	Translation of English Texts	3.00
TRS360	Translation of Arabic texts	3.00
TRS340	Translating Literary Texts	3.00
TRS430	Advanced Written Translation	3.00
TRS452	Practicum / Oral	3.00

<b>Elective Courses (9.00 hours)</b>		<b>Credit Hours</b>
ARB110	Introduction to Syntax & Morphology	3.00
ENG312	Cultural Literacy: English in the World	3.00
LIT200	Writing About literature	3.00
TRS310	Contrastive Analysis of Arabic/English	3.00
TRS312	Translation in the Community	3.00
TRS370	Modern Media Translation	3.00
TRS412	Translation of Scientific/Legal Text	3.00
TRS433	Translation of Business Correspondence & Promotional Materials	3.00

**Minors and Free Electives (Req. CH:45)**

<b>Required Minor (1) (18.00 hours)</b>	<b>Credit Hours</b>
<b>Optional Minor (2) (Students can either take Minor (2) or 18 credit hours from any free elective courses.) (18.00 hours)</b>	<b>Credit Hours</b>
<b>Free Electives (9.00 hours)</b>	<b>Credit Hours</b>

## Minor in Korean Language

The Minor in Korean Language is an 18-credit hour program. It aims to equip students with basic written and oral skills in Korean language in a range of contexts. Students will have the ability to analyze and translate very short texts from English and Arabic into Korean and vice versa. By the end of the courses, students should have acquired the skills necessary to take an exam set by the Korean Embassy, entitling them to a certificate issued by the embassy.

### Program Objectives

- To enable students to listen to, speak, read and write Korean at beginner and advanced levels (Level 1 to Level 3 of the TOPIK (Test of Proficiency In Korean)).
- To familiarize students with the Korean culture.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Produce basic conversations related to daily surviving skills.
- Demonstrate understanding of the contents related to personal and familiar topics.
- Write simple and useful sentences related to everyday life.
- Use formal and informal expressions according to the situation.
- Use basic language structures necessary to maintain social relationship.
- Identify aspects of Korean culture.

### Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Korean Language**

<b>Core Courses (12.00 hours)</b>		<b>Credit Hours</b>
KOR100	Korean I for Beginners	3.00
KOR102	Korean II for Beginners	3.00
KOR202	Intermediate Korean	3.00
KOR301	Advanced Korean	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
KOR302	Korean Language and Culture	3.00
KOR401	Reading and Writing (Korean)	3.00
KOR411	Introduction to Translation (Korean)	3.00
KOR416	Transation of Short Texts into Korean	3.00

# Minor in Business Translation

The Minor in Business Translation is an 18-credit hour program. It aims to introduce students to the various types of business letters and documents. Students will learn how to effectively write and translate different business texts in both languages.

## Program Objectives

- Introduce students to basic concepts in translation and business.
- Develop students' skills in writing and translating between English and Arabic.
- Develop students' skills in translating business correspondence and promotional materials in English and Arabic.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain basic concepts in translation and business.
- Contrast English and Arabic constructions on the semantic, syntactic and pragmatic levels for the purpose of translation.
- Identify various types of business correspondence and promotional texts.
- Write standard business letters in English and Arabic.
- Translate business letters between English and Arabic.
- Write different genres of promotional texts used in the media.
- Translate promotional texts between English and Arabic.

## Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**Business Translation**

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
MSC270	Writing for the Media	3.00
PRVT2652	Business Law (E)	3.00
TRS310	Contrastive Analysis of Arabic/English	3.00
TRS331	Basic Issues in Translation-TA	3.00
TRS433	Translation of Business Correspondence & Promotional Materials	3.00
TRS480	Practicum-TA-	3.00

## Minor in French Language

The Minor in French Language is an 18-credit hour program. It aims to equip students with basic written and oral skills in the French language in a range of contexts. Students will have the ability to analyze and translate short texts from English and Arabic into French and vice versa. By the end of the courses, students should have acquired the skills necessary to take an exam set by the Chamber of Commerce & Industry of Paris to gain the Diplôme de Français Professionnel B1.

### Program Objectives

- To enable students to listen to, speak, read and write French at beginner and advanced levels (A1 and A2 of the CECR).
- To familiarize students with the French culture and the francophone world.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of simple and familiar conversations.
- Produce simple spoken French based on familiar everyday topics.
- Answer simple and complex questions on familiar topics presented in different writing forms.
- Demonstrate a basic understanding of French spelling and pronunciation.
- Use simple grammatical structures and vocabulary in context.
- Produce written texts about everyday situations using simple and complex sentences on familiar topics or topics of personal interest.
- Identify aspects of French culture and the francophone world (French speaking countries).

### Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**French Language**

<b>Required Courses (12.00 hours)</b>		<b>Credit Hours</b>
FCH260	Listening & Speaking	3.00
FCH270	French Language & Culture I	3.00
FCH272	French Language & Culture II	3.00
FCH321	Reading & Writing I	3.00

**Elective Clusters: Student must choose a cluster and complete both courses**

<b>Cluster One (6.00 hours)</b>		<b>Credit Hours</b>
FCH303	Advanced Listening & Speaking	3.00
FCH401	Advanced Reading & Writing	3.00

<b>Cluster Two (6.00 hours)</b>		<b>Credit Hours</b>
FCH411	Introduction to Translation FR	3.00
FCH442	Translation of Texts from & to French	3.00

# Minor in German Language

The Minor in German Language is an 18-credit hour program. It aims to equip students with basic written and oral skills in German language in a range of contexts. Students will have the ability to analyze and translate short texts from English and Arabic into German and vice versa. By the end of the courses, students should have acquired the skills necessary to take the relevant language exam at the Goethe institute.

## Program Objectives

- Enable students to achieve language proficiency up to A2-level according to the European Frame of Reference for language learning (CEFR), which allows communicating appropriately in a variety of situations.
- Familiarize students with the history and culture of German-speaking countries.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of written and spoken German on familiar topics as used by native speakers
- Produce simple spoken and written German, intelligible to native speakers unaccustomed to contact with foreigners.
- Employ communicative strategies for interacting on unfamiliar topics.
- Identify culturally appropriate behavior in a variety of social contexts.
- Recognize cultural references such as landmarks, historical events and figures, music, traditions and customs.

## Degree Requirements

**Required Credit Hours : minimum 18 hours**  
**German Language**

<b>Required Courses (12.00 hours)</b>		<b>Credit Hours</b>
GER100	German I for Beginners	3.00
GER102	German II for Beginners	3.00
GER202	Intermediate German	3.00
GER301	Advanced German	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
GER302	German Language and Culture	3.00
GER401	Reading and Writing (GER)	3.00
GER411	Intro to Translation (GER)	3.00
GER416	Trans of Texts from & in GER	3.00

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# College of Information Technology

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## Department of Information Systems and Security

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### Bachelor of Science in Information Technology

Information Technology (IT) is becoming the cornerstone to any economy in the world. Since the spread of the Internet and communication applications in their diversified forms, IT became an integrated part of everyone's life in modern society. In UAE, IT plays a major role in the development of the society. Therefore, it is only natural to have the United Arab Emirates University offer a degree program in IT in its various specializations. The College of Information Technology offers a bachelor of science degree in Information Technology (BSc in Information Technology) in seven specialization tracks: Intelligent Systems (INSYS), Software Development (SWD), Information Security (SEC), Networking (NETW), E-Commerce (ECOM), Enterprise System (ENSYS), and Computer System Design (CSD). The Bachelor of Science in Information Technology is accredited by the Computing Accreditation Commission (CAC) of ABET, <http://www.abet.org>. Enrollment and degree awarded for the past five years are as follows: Enrollment: 2015-2016: 587, 2014-2015: 557, 2013-2014: 514, 2012-2013:478, 2011-2012:481 Degree awarded: 2015-2016: 68, 2014-2015: 46, 2013-2014: 60, 2012-2013:107, 2011-2012:127

#### Program Objectives

- Attain leadership roles that promote the development of IT.
- Demonstrate the highest standards of technical and ethical practice.
- Apply skills and knowledge to contribute to the evolution of the IT sector to serve the community.
- Acquire advanced competency levels in IT by engaging in continuous self-development, certification, and graduate studies.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply knowledge of computing and mathematics appropriate to the discipline.
- Analyze a problem, and identify and define the computing requirements appropriate to its solution.
- Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- Function effectively on teams to accomplish a common goal.
- Discuss professional, ethical, legal, security, and social issues and responsibilities.
- Communicate effectively in written and oral forms with a range of audiences.
- Analyze the local and global impact of IT on individuals, organizations and society.
- Recognize the need for and engage in continuing professional development.
- Use current techniques, skills, and tools necessary for computing practice.
- Use and apply the current concepts and practices of the core information technologies.

- Identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems.
- Integrate IT-based solutions into the user environment.
- Discuss the best practices and standards and their application.
- Create an effective project plan.

## Degree Requirements

**Required Credit Hours : minimum 130 hours**  
**General Education (Req. CH:42)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
ITBP370	Professional Responsibility in Information Technology <sup>1</sup>	3.00
1 : Also counts towards the Major		

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1081	Introduction to Academic English for Information Technology I	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
ITBP119	Algorithms and Problem Solving <sup>2</sup>	3.00
2 : Also counts towards the Major		

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

  

<b>Cluster 3: The Human Community - Humanities and Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00

LIT150	Introduction to Literature	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS125	Contemporary Civilization	3.00
HIS121	World History: Origins to 1500	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
PHYS105	General Physics I <sup>4</sup>	3.00

BIOC100	Basic Biology I	3.00
CHEM111	General Chemistry I	3.00
4 : Required		

<b>Cluster 5: Capstone Experience (6.00 hours)</b>		<b>Credit Hours</b>
ITBP480	Senior Graduation Project I	3.00
ITBP481	Senior Graduation Project II <sup>5</sup>	3.00
5 : Both ITBP 480 & ITBP 481 counts towards the Major		

### College of Information Technology (Req. CH:61)

<b>Required Courses (61.00 hours)</b>		<b>Credit Hours</b>
ITBP103	Principles of Information Technology	3.00
ITBP121	Programming Lab I	1.00
ITBP202	Discrete Mathematics	3.00
ITBP205	Digital Design & Computer Organization	3.00
ITBP210	Communication & Networks Fundamentals	3.00
ITBP219	Object Oriented Programming	3.00
ITBP221	Programming Lab II	1.00
ITBP280	Information Technology Project Management Exhibition	3.00
ITBP495	Internship	12.00
ITBP301	Security Principles & Practice	3.00
ITBP307	Information Systems Fundamentals	3.00
ITBP315	Operating Systems Fundamentals	3.00
ITBP316	Human Computer Interaction	3.00
ITBP319	Data Structures	3.00
ITBP321	Web Application Development Lab	1.00
ITBP340	Database Systems	3.00
ITBP418	Entrepreneurship in Information Technology	3.00
MATH110	Calculus II	3.00
PHYS135	General Physics Lab I	1.00
STAT210	Probability and Statistics	3.00

### Computer Systems Design Track (Req. CH:21)

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
CSEB300	Computer Architecture	3.00
CENG201	Circuits Fundamentals	3.00
CSEB310	Digital Design with HDL	3.00
CSEB321	Hardware Testing and Fault Tolerance	3.00
CENG231	Circuits Lab	1.00
CSEB332	Digital Design with HDL Lab	1.00
CSEB425	Embedded Systems	3.00
CSEB433	Embedded Systems Lab	1.00

<b>Specialization Electives (3.00 hours)</b>		<b>Credit Hours</b>
CSEB400	Platform Architecture & Technology	3.00
CSEB440	Software Integration	3.00
CSEB450	Introduction to Robotics	3.00
CSEB499	Special Topics in CSE	3.00

### E-Commerce Track (Req. CH:21)

<b>Required Courses (21.00 hours)</b>		<b>Credit Hours</b>
ECBP310	E-Commerce Principles	3.00
ECBP331	E-Commerce Lab I	1.00
ECBP401	E-Marketing	3.00
ECBP411	Mobile Commerce	3.00
ECBP412	E-Services	3.00
ECBP425	Multimedia Systems	3.00
ECBP432	E-Commerce Lab II	1.00
ECBP433	Multimedia Systems Lab	1.00
ISBP350	Enterprise Resource Planning	3.00

### Enterprise Systems Track (Req. CH:21)

<b>Required Courses (21.00 hours)</b>		<b>Credit Hours</b>
ISBP301	E-Enterprise	3.00
ISBP309	Enterprise Information Systems	3.00
ISBP331	Business Integration Lab I	1.00

ISBP350	Enterprise Resource Planning	3.00
ISBP431	Advanced Database Systems	3.00
ISBP432	Advanced Database Systems Lab	1.00
ISBP433	Business Integration Lab II	1.00
ISBP440	Business Intelligence	3.00
ISBP455	Knowledge Management	3.00

### Information Security Track (Req. CH:21)

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
SECB310	Cryptographic Algorithms & Protocols	3.00
SECB331	Cryptography Lab	1.00
SECB358	Network Border Control	3.00
SECB405	Security Protocols for Internet & E-Commerce	3.00
SECB425	Security Architecture & Mechanics	3.00
SECB432	Networks Security Lab	1.00
SECB433	Systems Security Lab	1.00
SECB455	Intrusion Detection & Response	3.00

<b>Specialization Electives (3.00 hours)</b>		<b>Credit Hours</b>
SECB408	Secure Mobile Code	3.00
SECB451	Policy Criteria & Evaluation	3.00
SECB499	Special Topics in Information Security	3.00

### Intelligent Systems Track (Req. CH:21)

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
CSBP301	Artificial Intelligence	3.00
CSBP331	Artificial Intelligence and Robotics Lab	1.00
CSBP400	Modeling & Simulation	3.00
CSBP411	Machine Learning	3.00
CSBP421	Smart Computer Graphics	3.00
CSBP432	Computer Graphics Lab	1.00
CSBP433	Intelligent Systems Studio	1.00
CSBP461	Internet Computing	3.00

<b>Specialization Electives (3.00 hours)</b>		<b>Credit Hours</b>
CSBP431	Bioinformatics	3.00
CSBP441	Applied Computer Vision	3.00
CSBP499	Special Topics in Computer Science	3.00

### Networking Track (Req. CH:21)

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
NEBP310	Network Protocols	3.00
NEBP331	Network and Security Protocols Lab	1.00
NEBP361	Network Security Protocols	3.00
NEBP432	Wireless Networks Lab	1.00
NEBP433	Advanced Networking Lab	1.00
NEBP441	Wireless and Mobile Communication	3.00
NEBP460	Network Application Software	3.00
NEBP470	Network Design and Implementation	3.00

<b>Specialization Electives (3.00 hours)</b>		<b>Credit Hours</b>
NEBP371	Network Management & Analysis	3.00
NEBP421	Advanced Network Services	3.00
NEBP472	Wireless Sensor Networks	3.00
NEBP473	Internet Architecture	3.00
NEBP499	Special Topics in Network Engineering	3.00

### Software Development Track (Req. CH:21)

<b>Required Courses (18.00 hours)</b>		<b>Credit Hours</b>
SWEB300	Software Engineering Fundamentals	3.00
SWEB319	Software Design	3.00
SWEB320	Formal Methods and Models	3.00
SWEB331	Software Analysis & Design Lab	1.00
SWEB401	Reuse and Component-based Development	3.00
SWEB423	Software Testing & Quality Assurance	3.00
SWEB432	Software Implementation Lab	1.00
SWEB433	Software Testing Lab	1.00

<b>Specialized Electives (3.00 hours)</b>		<b>Credit Hours</b>
SWEB312	Software Requirements and Specification	3.00
SWEB450	Analysis of Algorithms	3.00
SWEB451	Game Development	3.00
SWEB499	Special Topics in Software Engineering	3.00

<b>Free Elective (6.00 hours)</b>	<b>Credit Hours</b>
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# **Bachelor of Science in Information Security**

The BS in Information Security degree program is designed to develop expertise in the area of information and network security. The program main objective is to provide the management skills and technical knowledge needed to plan, acquire, operate, manage and evaluate an organization's information security operations. Students enrolled in this program are expected to pursue a plan of study to assure professional competence and breadth of knowledge in the field of information and network security. The emphasis of this program is on applying proven and innovative practices for building industry-standard secure systems, applications and networks. The program will go a long way toward meeting the growing need for information technology specialists with competence in IT in a broad sense along with relevant expertise in information and network security.

## **Program Objectives**

- Alumni will serve in UAE organizations of all sizes and employ their knowledge of information and network security, principles, theories, and applications in their job roles.
- Alumni will be engaged in designing, analyzing, auditing, testing, implementing and acquiring information and network security solutions for their organizations.
- Alumni will serve UAE society by being aware of the methodologies, techniques, tools and skills necessary for participating, competing and developing strong and cost effective information and network security solutions and products.
- Alumni will be committed to the highest standards of ethical practice relevant to the information and network security profession.
- Alumni will be able to encounter UAE market expectations with a set of professional skills including information and network security new technologies and tools, communication skills and team works.

## **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- apply knowledge of mathematics and science in information security.
- design and conduct information security experiments, as well as to analyze and interpret data.
- design an information security system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- function effectively individually and on multidisciplinary teams.
- identify, formulate and solve information security problems.
- discuss professional, ethical, legal, security and social issues and responsibilities.
- communicate effectively in writing and orally with a range of audiences.
- describe and analyze the impact of information security solutions in a global, economic, environmental, and societal context.

- recognize the need for, and an ability to engage in life-long learning.
- discuss contemporary issues related to information security.
- use techniques, skills, and modern tools necessary for information security practices.
- apply solutions based on the information security life cycle of an organization, including policy, planning, acquisition, development and evolution of secure infrastructures.

## Degree Requirements

**Required Credit Hours : minimum 130 hours**  
**General Education (Req CH: 42)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
ITBP370	Professional Responsibility in Information Technology	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1081	Introduction to Academic English for Information Technology I	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
ITBP119	Algorithms and Problem Solving <sup>1</sup>	3.00
1 : Also counts towards the Major		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities and Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00

MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS125	Contemporary Civilization	3.00
HIS121	World History: Origins to 1500	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
PHYS105	General Physics I	3.00
BIOC100	Basic Biology I	3.00

CHEM111	<b>General Chemistry I</b> <sup>2</sup>	3.00
2 : Students should take either BIOC100 or CHEM111		

<b>Cluster 5: Capstone Experience (6.00 hours)</b>		<b>Credit Hours</b>
ITBP480	Senior Graduation Project I	3.00
ITBP481	Senior Graduation Project II	3.00

## College of Information Technology

<b>College Requirements (36.00 hours)</b>		<b>Credit Hours</b>
ITBP202	Discrete Mathematics	3.00
ITBP205	Digital Design & Computer Organization	3.00
ITBP319	Data Structures	3.00
ITBP219	Object Oriented Programming	3.00
ITBP495	Internship	12.00
ITBP315	Operating Systems Fundamentals	3.00
MATH110	<b>Calculus II</b>	3.00
ITBP103	Principles of Information Technology	3.00
STAT210	<b>Probability and Statistics</b>	3.00

<b>Major Requirements (46.00 hours)</b>		<b>Credit Hours</b>
CSBP320	<b>Data Mining</b>	3.00
ITBP121	Programming Lab I	1.00
ITBP210	Communication & Networks Fundamentals	3.00
ITBP301	Security Principles & Practice	3.00
ITBP221	Programming Lab II	1.00
ITBP340	Database Systems	3.00
ISEC311	<b>Network Security I</b>	3.00
ISEC321	<b>Network Security II</b>	3.00
ISEC312	<b>Cryptography</b>	3.00
ISEC322	<b>Design and Analysis of Security Protocols</b>	3.00
ISEC323	<b>Secure Software Design and Engineering</b>	3.00
ISEC324	<b>Cryptography Lab</b>	1.00
ISEC411	<b>Privacy and Anonymity</b>	3.00
ISEC412	<b>Digital Forensics</b>	3.00
ISEC413	<b>Security Architecture and Mechanisms</b>	3.00
ISEC414	<b>Network Security Lab</b>	1.00

ISEC421	Risk Analysis and Management	2.00
ISEC422	Security Policy, Laws, and Governance	3.00
ISEC423	Systems Security Lab	1.00

<b>Major Electives (Students should select two courses from the list below.) (6.00 hours)</b>		<b>Credit Hours</b>
ISEC416	Information Security Management	3.00
ISEC417	Database Security	3.00
ISEC424	Hardware-Oriented Security and Trust	3.00
ISEC428	Special Topics in Information Security	3.00
ITBP280	Information Technology Project Management Exhibition	3.00
ITBP418	Entrepreneurship in Information Technology	3.00

# Department of Computer and Network Engineering

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## Bachelor of Science in Computer Engineering

Computer Engineering (CE) is a field of study that encompasses the fundamental principles, methods, and modern tools for the design and implementation of computing systems. This field spans and bridges topics in both electrical engineering (EE) and computer science (CS). Advances in technology are yielding smaller and higher-performance computer systems permeating into a wide range of applications, from communication systems to consumer products and common household appliances. A Bachelor of Science (BSc) in CE program should provide a balanced perspective on both hardware and software elements of computing systems, and on their relative design trade-offs as well as applications.

### Program Objectives

- The program graduates should be able to practice computer engineering to serve UAE industries, government agencies, and international industries.
- The program graduates should have the necessary background and technical skills to work professionally in one or more of the following areas: VLSI design, embedded systems, network engineering, and robotics.
- Within several years from graduation our alumni should have established a successful career in a computer engineering related field, leading or participating effectively in interdisciplinary engineering projects, as well as continuously adapting to changing technologies.
- The program graduates should be prepared for admission to top graduate programs, reaching advanced degrees in engineering and related disciplines.
- The program graduates should be well prepared for personal and professional success with awareness and commitment to ethical and social responsibilities, both as individuals and in team environments

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- apply knowledge of mathematics, science, and computer engineering.
- design and conduct computer-engineering experiments, as well as to analyze and interpret data.
- design a computing system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- function effectively individually and on multidisciplinary teams.
- identify, formulate, and solve computer-engineering problems.
- discuss professional, ethical, legal, computer engineering and social issues and responsibility.

- communicate effectively in writing and orally with a range of audiences.
- explain the impact of computer engineering solutions in a global, economic, environmental, and societal context.
- recognize the need for, and an ability to engage in life-long learning
- discuss computer engineering contemporary issues.
- use techniques, skills, and modern tools necessary for computer engineering practice.

## Degree Requirements

**Required Credit Hours : minimum 144 hours**

**General Education (Req CH: 42)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
ITBP370	Professional Responsibility in Information Technology	3.00

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1081	Introduction to Academic English for Information Technology I	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
ITBP119	Algorithms and Problem Solving <sup>1</sup>	3.00
<i>1 : Also counts towards the Major</i>		

  

<b>Cluster 3: The Human Community - Humanities and Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00

LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
HIS120	Arab & Islamic Civilization	3.00
GEO200	World Regional Geography	3.00
HIS125	Contemporary Civilization	3.00
HIS121	World History: Origins to 1500	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
PHYS105	General Physics I <sup>2</sup>	3.00
CHEM111	General Chemistry I	3.00
BIOC100	Basic Biology I	3.00
2 : Required		

<b>Cluster 5: Capstone Experience (6.00 hours)</b>		<b>Credit Hours</b>
ITBP480	Senior Graduation Project I	3.00
ITBP481	Senior Graduation Project II	3.00

### College of Information Technology

<b>College Requirements (36.00 hours)</b>		<b>Credit Hours</b>
ITBP202	Discrete Mathematics	3.00
ITBP205	Digital Design & Computer Organization	3.00
ITBP319	Data Structures	3.00
ITBP219	Object Oriented Programming	3.00
ITBP495	Internship	12.00
ITBP315	Operating Systems Fundamentals	3.00
ITBP103	Principles of Information Technology	3.00
MATH110	Calculus II	3.00
STAT210	Probability and Statistics	3.00

<b>Major Requirements (50.00 hours)</b>		<b>Credit Hours</b>
CENG328	Introduction to Embedded Systems	3.00
ITBP210	Communication & Networks Fundamentals	3.00
CENG201	Circuits Fundamentals	3.00
CENG231	Circuits Lab	1.00
PHYS1120	Physics II for Engineering	4.00
MATH140	Linear Algebra I	3.00
MATH275	Ordinary Differential Equations	3.00
CENG221	Computer Architecture	3.00
CENG329	Introduction to Embedded Systems Lab	1.00
PHYS231	Electronics Fundamentals	3.00
ITBP301	Security Principles & Practice	3.00
ELEC370	Electronic Circuits	3.00

ELEC375	Electronic Circuits Lab	1.00
CENG325	Digital Design lab	1.00
CENG320	Signals and Systems I	3.00
CENG326	Entrepreneurship for Computer Engineers	3.00
CENG324	Digital System Design	3.00
SWEB300	Software Engineering Fundamentals	3.00
ITBP121	Programming Lab I	1.00
PHYS135	General Physics Lab I	1.00
ITBP221	Programming Lab II	1.00

**Major Electives (Sixteen (16) semester credit hours of Major Technical Electives (five courses and one lab) are required.) (16.00 hours)**

**Credit Hours**

CENG518	VLSI Design	3.00
CENG513	Hardware Testing and Fault Tolerance	3.00
CENG521	Hardware/Software Integration	3.00
CENG530	Computer Network Protocols	3.00
CENG531	Wireless Communication and Sensor Networks	3.00
CENG532	Network Security	3.00
CENG533	Advanced Network Services	3.00
CENG529	Networking Lab	1.00
CENG580	Selected Topics in Computer Engineering	3.00

# **Department of Computer Science and Software Engineering**

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## **Bachelor of Science in Computer Science**

Computer science (CS) is the fundamental scientific and practical approach to computation and its applications. A computer scientist concentrates on the theory of computation and the design of computational systems. The program objectives aim at producing graduates who are prepared for careers in CS profession and be able to receive an advanced degree in CS related areas. The graduates are prepared to work for industry or government agencies, or are in private practice, be able to demonstrate competence and are successfully contributing to the UAE computer science and information technology workforce.

### **Program Objectives**

- Serve UAE government agencies and industry with a broad-based knowledge of computer science, related principles, theories, and applications.
- Provide UAE government agencies and industry the capacity in designing, analyzing, testing, and implementing computer systems.
- Meet workplace expectations with a set of professional skills including communication skills, identification of opportunity and risk, an ability to perform well in teams, and a commitment to life-long learning.
- Be committed to the highest standards of ethical practice and to social and environmental issues relevant to the computer science profession.
- Be aware of the tools and skills necessary for participating effectively in building a healthy, diverse and sustainable UAE economy.

### **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- apply knowledge of science, computing and mathematics appropriate to Computer Science.
- analyze a problem, and identify and define the computing requirements appropriate to its solution.
- design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- function effectively on teams to accomplish a common goal.
- discuss professional, ethical, legal, security and social issues and responsibilities.
- communicate effectively in written, oral, and graphical forms with a range of audiences.
- analyze the local and global impact of Computer Science on individuals, organizations, and society.
- recognize the need for and engage in continuing professional development.
- use current techniques, skills, and tools necessary for computer science practice.

- apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
- apply design and development principles in the construction of software systems of varying complexity.

## Degree Requirements

**Required Credit Hours : minimum 130 hours**  
**General Education (Req CH:42)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Ethics (3.00 hours)</b>		<b>Credit Hours</b>
ITBP370	Professional Responsibility in Information Technology	3.00

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1081	Introduction to Academic English for Information Technology I	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
ITBP119	Algorithms and Problem Solving <sup>1</sup>	3.00
1 : Also counts towards the Major		

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

  

<b>Cluster 3: The Human Community - Humanities and Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00

MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS125	Contemporary Civilization	3.00
HIS121	World History: Origins to 1500	3.00
GEO200	World Regional Geography	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
PHYS105	General Physics I <sup>2</sup>	3.00
BIOC100	Basic Biology I	3.00

CHEM111	General Chemistry I	3.00
2 : Required		

Cluster 5: Capstone Experience (6.00 hours)		Credit Hours
ITBP480	Senior Graduation Project I	3.00
ITBP481	Senior Graduation Project II	3.00

## College of Information Technology

College Requirements (36.00 hours)		Credit Hours
ITBP202	Discrete Mathematics	3.00
ITBP205	Digital Design & Computer Organization	3.00
ITBP319	Data Structures	3.00
ITBP219	Object Oriented Programming	3.00
ITBP495	Internship	12.00
ITBP315	Operating Systems Fundamentals	3.00
ITBP103	Principles of Information Technology	3.00
MATH110	Calculus II	3.00
STAT210	Probability and Statistics	3.00

Major Requirements (40.00 hours)		Credit Hours
ITBP121	Programming Lab I	1.00
ITBP210	Communication & Networks Fundamentals	3.00
ITBP221	Programming Lab II	1.00
ITBP301	Security Principles & Practice	3.00
ITBP316	Human Computer Interaction	3.00
ITBP321	Web Application Development Lab	1.00
ITBP340	Database Systems	3.00
CSBP301	Artificial Intelligence	3.00
CSBP400	Modeling & Simulation	3.00
CSBP411	Machine Learning	3.00
CSBP412	Introduction to Engineering and Design	3.00
CSBP421	Smart Computer Graphics	3.00
CSBP461	Internet Computing	3.00
CSBP492	Computer Science Project Lab	1.00
SWEB450	Analysis of Algorithms	3.00
SWEB300	Software Engineering Fundamentals	3.00

<b>Major Electives (12.00 hours)</b>		<b>Credit Hours</b>
CSBP320	Data Mining	3.00
CSBP431	Bioinformatics	3.00
CSBP476	Robotics and Intelligent Systems	3.00
CSBP483	Mobile Web Content and Development	3.00
CSBP487	Computer Animation and Visualization	3.00
CSBP491	Computational Intelligence for Data Management	3.00
CSBP499	Special Topics in Computer Science	3.00
SWEB451	Game Development	3.00

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# College of Law

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## Department of Public Law

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### Bachelor of Law

The Bachelor of Law program is designed to provide comprehensive legal education for students interested in the legal profession. Students study several law courses covering public and private law disciplines. As a result, the program provides them with accurate knowledge about the basic concepts and rules of law, with special focus on UAE laws, the accurate way to apply laws and regulations on facts, the interpretation of law provisions according to pre-defined interpretation rules, the comparison between legislative rules and the jurisprudence, as well as judicial trends. Furthermore, the program addresses legal writing skills to enable the students to write memorials and other legal documents efficiently and correctly. Students draw valuable lessons from the practical training offered through the educational courts based in male and female campus. The COL adopts educational court as an essential part of the educational process; which provides great opportunity for students to link theoretical and practical aspects of law study. The College of Law prides itself with its numerous partnerships with local and federal institutions, as well as international law firms, where the students are provided hands-on experience combining theoretical and practical aspects of education.

#### Program Objectives

- Build and develop a solid scientific base of knowledge in all areas of public and private law among the students.
- Create and enhance the professional practical aspect of the theoretical knowledge gained by students.
- Enable students to conduct legal research in accordance with well-established scientific research methodologies.
- Enable students to acquire professional skills and to efficiently use them in order to enhance their professional performance.
- Develop the ethical aspects of students' unique personality which are necessary for the exercise of the legal profession.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the norms and basic principles of law in general, and the UAE law in particular.
- Apply rules of law on actual facts in a correct manner.
- Interpret legal texts in accordance with well-established principles of interpretation.
- Conduct a scientific research in accordance with legal research methodologies.
- Formulate memorandums and judicial decisions in a clear and correct language.

- Address audience with confidence and fluency.
- Work efficiently as a team member.
- Use technology accurately and efficiently in undertaking various duties.
- Independently learn from theoretical and practical contemporary legal developments.
- Lead a team with effectiveness and efficiency.
- Express his/her commitment to the rules of law.

## Degree Requirements

**Required Credit Hours : minimum 136 hours**

**General Education (Required Credits: 38)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PRVT113	Introduction to Law <sup>1</sup>	3.00
1 : Also counts towards the Major		

  

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU1052	English for Law I	3.00

  

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>2</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
2 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

  

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
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SHAR2073	Personal Status (1) <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
SHAR112	Introduction to Islamic Law and its Sources <sup>4</sup>	3.00
4 : Also counts towards the Major		

<b>Cluster 3: The Human Community - The Global Experience (2.00 hours)</b>		<b>Credit Hours</b>
PUBL442	International Organizations <sup>5</sup>	2.00
5 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH120	Contemporary Applications of Math	3.00
STAT101	Statistics in the Modern World	3.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
ARAG205	Introduction to Fish & Animal Science	3.00
ARAG220	Natural Resources	3.00
BION100	Biology and its Modern Application	3.00
CHEM181	Chemistry in the Modern World	3.00
FDSC250	Contemporary Food Science & Nutrition	3.00
GEOL110	Planet Earth	3.00
PHED201	Physical Fitness and Wellness	3.00
PHYS100	Astronomy	3.00
PHYS101	Conceptual Physics	3.00

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
LAW340	Internal Training <sup>6</sup>	3.00
6 : Also counts towards the Major		

## Law Major

<b>Required Courses (92.00 hours)</b>		<b>Credit Hours</b>
LW111	Arabic For Specific Purposes	3.00
LW202	Writing and Legal Research	2.00

LW240	External Training	6.00
PRVT227	Principles of Commercial Law	3.00
PRVT333	Selected Studies in Comparative Private Law	3.00
PRVT338	Company Law	3.00
PRVT451	Primary Rights in Rim	2.00
SHAR452	Shaira Studies for Islamic Banking Operations	2.00
PRVT453	Commercial Papers & Banking	3.00
PRVT454	Personal and Real Securities	2.00
PRVT462	Intellectual Property Laws	2.00
PRVT2051	Obligations (1)	2.00
SHAR205	Principles of Islamic Jurisprudence (Fiqh) 1	3.00
PRVT2151	Obligations (2)	2.00
PRVT2152	Obligations (3)	2.00
PRVT302	Civil Procedures	3.00
PRVT3034	Labour Law	2.00
PRVT3073	Obligations (4)	2.00
SHAR3213	Personal Stutes (2)	3.00
PRVT3243	Nominated Contracts (Sale&Lease)	3.00
SHAR3262	Personal Status (3) "Heritage"	2.00
SHAR402	Principles of Islamic Jurisprudence (Fiqh) 2	3.00
PRVT4492	The Law of Execution	2.00
PRVT407	Private International Law	3.00
PRVT4725	Maritime Law	2.00
PUBL203	The Criminal Law- Part(1)	2.00
PUBL220	The Criminal Law-Part (2)	2.00
PUBL226	Selected Studies in Comparative Public Law	3.00
PUBL305	Penal Law Specific (1) Individual and Financial Crimes	3.00
PUBL114	Constitutional Law	3.00
PUBL206	Administrative Law	3.00
SHAR3283	Hudood in Islam	2.00
PUBL207	Public International Law	3.00
PUBL4092	Criminal Procedures Law (1)	2.00
PUBL4093	Criminal Procedures Law (2)	2.00
SHAR4413	Retribution and Blood Money	2.00

## Elective Courses (Req. CH:6)

<b>1- Private Law (2.00 hours)</b>		<b>Credit Hours</b>
PRVT339	Commercial Arbitration Law	2.00
PRVT450	Contracts (2)	2.00
PRVT2111	Legal Aspects of e-commerce(E)	2.00
SHAR4463	Legecy and Mortmain (Waqf)	2.00

<b>2- Public Law (4.00 hours)</b>		<b>Credit Hours</b>
PUBL303	Legal Status of Foreign Residents	2.00
PUBL306	Penal Law - Private Specific (2) Emerging Crimes	2.00
PUBL316	Environmental Law	2.00
PUBL401	Human Rights	2.00
PUBL404	International Criminal Law	2.00
PUBL405	International Humanitarian Law	2.00
PUBL3222	Criminology and penology	2.00
PUBL3294	Public Employment	2.00
SHAR3363	International Relations in Islam	2.00

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# College of Medicine and Health Sciences

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## Bachelor of Medical Sciences

This interdisciplinary program is designed to prepare UAE nationals for the basic understanding of the human body in health and disease. The courses of the program emphasize hands-on teaching in laboratories to help students acquiring research skills in medical sciences. Graduates of this program will be able to pursue advanced professional and graduate degrees and/or develop as leading researchers in biomedical sciences.

### Program Objectives

- Biomedical Knowledge.
- Biomedical Research Skills.
- Life-long Learning.
- Interpersonal & Communication Skills.
- Professionalism.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate basic knowledge of biomedical science disciplines including human biology in health and disease.
- Apply practical skills and techniques of biomedical sciences, ranging from basic microscopy to biochemical, molecular, and genetics methods.
- Conduct research using appropriate methods, statistical tests, and ethical procedures.
- Communicate effectively in oral and written forms with researchers, clinicians, and the public.
- Demonstrate ethical and professional attitudes and commitment to life-long learning in biomedical field; and
- Discuss global issues in biomedical research and health problems.

### Degree Requirements

**Required Credit Hours : minimum 129 hours**

**General Education (Req. CH:42)**

<b>Cluster 1: Values to Live By - Islam (Req CH:3) (N/A)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (2.00 hours)</b>		<b>Credit Hours</b>
PCOM226	Professional Practice and Communication 4	2.00

<b>Cluster 2: Skills for Life - English Communication Skills (6.00 hours)</b>		<b>Credit Hours</b>
PCOM105	Professional Practice and Communication 1	3.00
PCOM112	Professional Practice and Communication 2	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills (2.00 hours)</b>		<b>Credit Hours</b>
PCOM219	Professional Practice and Communication 3	2.00

  

<b>Cluster 3: The Human Community - Emirates Society (Req CH:3) (N/A)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

  

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
PSCH307	Social Behavioral Sciences	3.00

  

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
LITM102	Language and Literacy	3.00

  

<b>Cluster 3: The Human Community - The Global Experience (2.00 hours)</b>		<b>Credit Hours</b>
PHCM309	Population Health	2.00

  

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
BSTA312	Biostatistics	3.00

  

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
HBIO106	Human Biology	3.00
MCHE108	Biological Chemistry	3.00

  

<b>Cluster 5: Capstone Experience (9.00 hours)</b>		<b>Credit Hours</b>
RSCH313	Research or capstone project	9.00

## Major Requirements

<b>Required Courses (81.00 hours)</b>		<b>Credit Hours</b>
MMAT101	Numeracy and Information Technology	3.00
MCHE103	Chemistry for Medicine	3.00
HANA104	Human Anatomy 1	3.00
CYHS107	Cytology and Histology	3.00
PHYL109	Human Physiology 1	4.00
BSTA110	Biostatistics and Epidemiology 1	2.00
HANA111	Human Anatomy 2	3.00
PHYL301	Advanced Physiology	3.00
ANAT302	Fundamental Techniques in Cell Biology	3.00
MBIO303	Principles of Biochemistry and Molecular Biology	3.00
MGEN305	Molecular Genetics and Genomics	3.00
RSCH306	Research Methodology	3.00
PATH310	Advanced Pathology	3.00
MCRO311	Host-Parasite Interactions	3.00
MEED304	Medical Informatics	3.00
EMBR213	Human Embryology	3.00
HANA214	Human Anatomy 3	3.00
MBIO215	Molecular Biology	3.00
PHYL216	Human Physiology 2	4.00
MGEN217	Medical Genetics	3.00
BSTA218	Biostatistics and Epidemiology 2	2.00
HANA220	Human Anatomy 4	4.00
MTAB221	Cellular Communication and Metabolism	2.00
PHYL222	Human Physiology 3	3.00
MCRO223	Principles of Microbiology and Immunology	3.00
PATH224	Pathology	3.00
PHAM225	Pharmacology	3.00

<b>Elective Courses (6.00 hours)</b>		<b>Credit Hours</b>
ETHC314	Law Ethics And Professionalism	2.00
MCRO315	Human Nutrition	2.00
MCRO316	Healthcare Systems	2.00

# Doctor of Medicine

The College of Medicine and Health Sciences (CMHS) offers four- year M.D program. The pre- requisite for the program is successful completion of two- year Pre- Medical program offered by CMHS. The MD program integrates basic and clinical sciences through a wide variety of learning opportunities including problem based learning. The curriculum offers candidates some flexibility to undertake extra curricula activities for example in clinical electives abroad. The MD program will prepare graduates who will be skilled, knowledgeable, and compassionate and who can serve the community as a professional and ethical physician. The graduates will be life- long learners and committed to quality healthcare and practice medicine in a patient- centered and multi professional environment. The graduates will also be ready to take up advanced training in various specialties of Medicine.

## Program Objectives

- Medical Knowledge.
- Interpersonal & Communication Skills.
- Patient Care.
- Practice based learning & Improvement.
- Professionalism.
- System based practice.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply knowledge of established and evolving biomedical, clinical, epidemiological, and behavioral sciences to solve patient's medical problems.
- Use communication skills that are effective in the exchange of information and collaboration with patients, their families, and health professionals.
- Demonstrate their abilities in providing patient care that is compassionate, appropriate and effective for the treatment of health problems.
- Reflect on patient care, appraising scientific evidence, and to continuously improve patient care based on self -evaluation and life-long learning.
- Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.
- Demonstrate an awareness of and responsiveness to the larger context and system of health care.

## Degree Requirements

Required Credit Hours : minimum 342 hours  
General Education (Req CH:46)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

  

<b>Cluster 1: Values to Live By - Ethics (2.00 hours)</b>		<b>Credit Hours</b>
PCOM226	Professional Practice and Communication 4	2.00

  

<b>Cluster 2: Skills for Life - English Communication Skills (6.00 hours)</b>		<b>Credit Hours</b>
PCOM105	Professional Practice and Communication 1	3.00
PCOM112	Professional Practice and Communication 2	3.00

  

<b>Cluster 2: Skills for Life - Thinking Skills 2 (2.00 hours)</b>		<b>Credit Hours</b>
PCOM219	Professional Practice and Communication 3	2.00

  

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

  

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (6.00 hours)</b>		<b>Credit Hours</b>
HEHA450	Behavioral Sciences	6.00

  

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
LITM102	Language and Literacy	3.00

  

<b>Cluster 3: The Human Community - The Global Experience (4.00 hours)</b>		<b>Credit Hours</b>
PHCM560	Public Health and Community Medicine	4.00

  

<b>Cluster 4: The Natural World - Mathematics (7.00 hours)</b>		<b>Credit Hours</b>
MMAT101	Numeracy and Information Technology	3.00
BSTA110	Biostatistics and Epidemiology 1	2.00
BSTA218	Biostatistics and Epidemiology 2	2.00

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
HBIO106	Human Biology	3.00
MCHE108	Biological Chemistry	3.00

<b>Cluster 5: Capstone Experience (4.00 hours)</b>		<b>Credit Hours</b>
ECCT579	Internal Elective	4.00

## Major Requirements

<b>Required Courses (296.00 hours)</b>		<b>Credit Hours</b>
MCHE103	Chemistry for Medicine	3.00
HANA104	Human Anatomy 1	3.00
CYHS107	Cytology and Histology	3.00
PHYL109	Human Physiology 1	4.00
HANA111	Human Anatomy 2	3.00
EMBR213	Human Embryology	3.00
HANA214	Human Anatomy 3	3.00
MBIO215	Molecular Biology	3.00
PHYL216	Human Physiology 2	4.00
MGEN217	Medical Genetics	3.00
HANA220	Human Anatomy 4	4.00
MTAB221	Cellular Communication and Metabolism	2.00
PHYL222	Human Physiology 3	3.00
MCRO223	Principles of Microbiology and Immunology	3.00
PATH224	Pathology	3.00
PHAM225	Pharmacology	3.00
MSCE299	Pre-Medical Program Exam	24.00
INFE310	Infection, Inflammation and Immunity	7.00
HONC320	Mechanisms of Malignancies and Hematology	7.00
CDPM330	Cardiovascular System	7.00
RESP340	Respiratory System	7.00
WMEX350	Renal and Urogenital Systems	6.00
CLSM360	Clinical Skills and Professionalism 1	6.00
GAST410	Gastrointestinal System	6.00
ENDO420	Endocrine and Metabolism	6.00
MUSC430	Musculoskeletal System	6.00

NEOR440	Neuroscience and Special Senses	10.00
CLSM460	Clinical Skills and Professionalism 2	6.00
OSCE499	Pre-Clinical Program Exam	20.00
IMED510	Internal Medicine I	8.00
SURG520	Surgery I	8.00
PAED530	Pediatrics I	8.00
OBGY540	Obstetrics and Gynaecology	8.00
PSCH550	Psychiatry and Behavioral Sciences	4.00
ECCT570	External Elective	4.00
IMED571	Internal Medicine II	4.00
IMED572	Internal Medicine Selective	4.00
SURG573	General Surgery	4.00
SURG574	Surgery Specialty	4.00
PAED575	Pediatrics II	4.00
FAMD576	Family Medicine	4.00
EMED578	Emergency Medicine	4.00
FIEE599	Final Integrated Examination	60.00

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## College of Science

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### Department of Biology

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#### Bachelor of Science in Biology

The program in Biology is designed to provide students with a strong foundation in biological sciences, after which they can major in one of three concentrations: cellular and molecular biology, general biology, or ecological and environmental biology. The Department of Biology emphasizes early students' involvement in the learning environment, to ensure solid foundation of their theoretical and practical skills. Students are exposed to diverse methods of biological analyses in all three major areas. The program aims at graduating students who are intellectually apt and technically wise, as to provide biological solutions to current major challenges of everyday life.

#### Program Objectives

- Develop proficiency of basic concepts in cellular and molecular biology, ecology and environmental sciences, and general biology.
- Foster teamwork and improve oral and communication skills.
- Foster a student-oriented research program that results in professional publications.
- Embrace student-oriented teaching methods that nurture critical thinking abilities and apply their knowledge to solve theoretical and empirical real-life problems.
- Prepare students for future job market and careers.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain major biological concepts.
- Solve and criticize practical and theoretical problems in biology.
- Communicate effectively in oral and written forms.
- Conduct safe and ethical biological lab experiments, data analysis, and interpretation of results.
- Demonstrate research competence including analysis of scientific literature and adherence to professional standards.
- Work effectively both independently and in a team.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU102	Introduction to Academic English For Science	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00

LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

BIOE240	Principles of Environmental Science <sup>2</sup>	3.00
2 : Also counts towards the Major		

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

MATH105	Calculus I <sup>3</sup>	3.00
3 : Also counts towards the Major		

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

CHEM111	General Chemistry I	3.00
PHYS105	General Physics I <sup>4</sup>	3.00
4 : Also counts towards the Major		

### Cluster 5: Capstone Experience (3.00 hours)

Credit Hours

BIOC480	Research Project <sup>5</sup>	3.00
5 : Also counts towards the Major		

## Biology Major (Req. CH:48)

<b>Required Courses (29.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
BIOC205	Basic Biology II	3.00
BIOC214	General Biology Lab	1.00
BIOC230	General Microbiology	3.00
BIOC250	Basic Ecology	3.00
BIOC270	General Genetics	3.00
BIOC275	Genetics Laboratory	1.00
BIOC290	Cell and Molecular Biology	3.00
BIOC490	Advanced Bioapplications (Capstone)	2.00
BIOC495	Seminar (Capstone)	1.00
BIOL500	Internship	6.00

<b>Supporting Required Courses Non-Biology (19.00 hours)</b>		<b>Credit Hours</b>
CHEM112	General Chemistry II	2.00
CHEM115	General Chemistry Lab	1.00
CHEM241	Organic Chemistry I	3.00
CHEM361	Biochemistry	3.00
CHEM245	Organic Chemistry Lab I	1.00
ITBP112	Introduction To Programming	3.00
MATH110	Calculus II	3.00
STAT235	Statistics for Biology	3.00

## Cellular and Molecular Biology Track

<b>Elective Courses (15.00 hours)</b>		<b>Credit Hours</b>
BIOM335	Molecular Biology of Genes	3.00
BIOM339	Virology	2.00
BIOM350	Developmental Biology	3.00
BIOM420	Molecular Basis of Cell and Tissue Development	3.00
BIOM433	Biotechnology & Genetic Engineering	3.00
BIOM435	Human Molecular Genetics	3.00
BIOM445	Macromolecules Structure Function and Bioinformatics	3.00
BIOM461	Tissue Culture	3.00
BIOM462	Immunology	3.00

BIOM489	Molecular Biology Techniques	1.00
BIOM492	Special Topics (Cell & Mole)	1.00

### Ecological and Environmental Biology Track

<b>Elective Courses (15.00 hours)</b>		<b>Credit Hours</b>
BIOE250	Biodiversity and Evolution	3.00
BIOE380	Desert Ecology	3.00
BIOE390	Wildlife & Rangeland Management	3.00
BIOE410	Field Survey & Environmental Assessment	3.00
BIOE425	Principles of Ecological Modeling	3.00
BIOE452	Oceanography	3.00
BIOE453	Environmental Toxicology	3.00
BIOE455	Ecology of Pathogens	3.00
BIOE457	Animal Behavior	3.00
BIOE459	Conservation Biology	3.00

### General Biology Track (Req. CH:15)

<b>Required Course (3.00 hours)</b>		<b>Credit Hours</b>
BIOG315	Fundamentals of Physiology	3.00

<b>Student must select ONE COURSE from each of the following groups Group A (3.00 hours)</b>		<b>Credit Hours</b>
BIOG330	Mycology	3.00
BIOG332	Parasitology	3.00
BIOG434	Bacteriology	3.00

<b>Group B (3.00 hours)</b>		<b>Credit Hours</b>
BIOG333	Entomology	3.00
BIOG360	Marine Biology	3.00
BIOG400	Biology of Invertebrates	3.00

<b>Group C (3.00 hours)</b>		<b>Credit Hours</b>
BIOG321	Histology	3.00
BIOG433	Biology of Vertebrates	3.00

BIOG445	Animal Physiology	3.00
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<b>Group D (3.00 hours)</b>		<b>Credit Hours</b>
BIOG450	Plant Physiology	3.00
BIOG460	Botany	3.00
BIOG470	Plant Anatomy	3.00

<b>Elective Courses - Upon the approval of the Department, the student may select a total of 18 Credit Hours from a specific minor. (18.00 hours)</b>	<b>Credit Hours</b>
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## Department of Chemistry

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### **Bachelor of Science in Biochemistry**

The B.Sc. in Biochemistry program provides students with a strong foundation in all areas of chemistry, with emphasis on biochemistry. Students also develop a good background in the related areas of molecular biology and microbiology. Students develop practical skills through laboratory courses utilizing state of the art equipment and internship training. Students also gain strong IT and communication skills and have the opportunity to become involved in biochemistry research. Graduates of the program are well prepared to take up positions in the chemical, pharmaceutical and biotechnology industries or pursue further studies at the graduate level.

#### **Program Objectives**

- To provide students with a strong foundation in chemistry and biochemistry.
- To develop students' transferable skills in areas such as communication and teamwork.
- To train students to use modern lab techniques safely and effectively.
- To develop students' appreciation of the role of biochemistry and scientific research in modern life.
- To prepare students for a successful career or further studies in chemistry and biochemistry.

#### **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of major concepts, theoretical principles and experimental findings in chemistry, biochemistry and biology.
- Conduct biochemistry laboratory experiments and analyze results.
- Retrieve and use chemical and biochemical information from scientific literature.
- Solve practical and theoretical problems in biochemistry and demonstrate critical thinking.
- Communicate effectively both orally and in writing.
- Work effectively independently and in teams
- Conform to safety, ethical and professional standards of chemistry and biochemistry.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live by - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU102	Introduction to Academic English For Science	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00

LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
CHEM111	General Chemistry I	3.00
PHYS105	General Physics I <sup>3</sup>	3.00

3 : Also counts towards the Major

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
BCHM345	Experimental Biochemistry	1.00
BCHM471	Protein Structure and Function <sup>4</sup>	2.00
4 : Also counts towards the Major		

## Biochemistry Major

<b>Required Courses (45.00 hours)</b>		<b>Credit Hours</b>
BCHM362	Biochemistry II	3.00
BCHM481	Special Topics Biochemistry I	2.00
BCHM482	Special Topics Biochemistry II	2.00
BIOC230	General Microbiology	3.00
BIOL270	General Genetics	2.00
BIOM399	Molecular Biology	2.00
BIOM489	Molecular Biology Techniques	1.00
CHEM112	General Chemistry II	2.00
CHEM115	General Chemistry Lab	1.00
CHEM211	Professional & Transferable Skills	1.00
CHEM221	Analytical Chemistry	3.00
CHEM231	Inorganic Chemistry I	3.00
CHEM241	Organic Chemistry I	3.00
CHEM242	Organic Chemistry II	3.00
CHEM245	Organic Chemistry Lab I	1.00
CHEM251	Physical Chemistry I	3.00
CHEM355	Physical Chemistry Lab I	1.00
CHEM361	Biochemistry	3.00
CHEM419	Internship	6.00

<b>Supporting Required Courses Non-Biochemistry (15.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
ENG310	Writing for Research	3.00
ITBP112	Introduction To Programming	3.00
MATH110	Calculus II	3.00
PHYS110	General Physics II	3.00

**Elective Courses - Upon the approval of the Department, the student may select a total of 18 Credit Hours from a specific minor. (18.00 hours)**

**Credit Hours**

**Free Elective (3.00 hours)**

**Credit Hours**

# Bachelor of Science in Chemistry

The B.Sc. in Chemistry program provides students with a strong foundation in the traditional branches of chemistry including analytical, organic, inorganic, and physical and biochemistry. The program also emphasizes development of IT and communication skills. Students develop practical skills through laboratory courses utilizing state of the art equipment. An internship placement provides students with training and preparation for the workplace. All students obtain experience in research through a project completed in their final year. Graduates of the program are well prepared to take up positions in the chemical and pharmaceutical industries or pursue further studies at the graduate level. The B.Sc. Chemistry program is accredited by the Canadian Society of Chemistry and the Royal Society of Chemistry.

## Program Objectives

- To provide students with a strong foundation in all of the major sub-disciplines of chemistry.
- To train students to use modern lab techniques safely and effectively.
- To develop students' transferable skills in areas such as communication and teamwork.
- To develop students' appreciation of the role of chemistry and scientific research in modern life.
- To prepare students for a successful career or further studies in chemistry.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of major concepts, theoretical principles and experimental findings in chemistry.
- Conduct chemistry laboratory experiments and analyze results.
- Retrieve and use chemical information from scientific literature.
- Solve practical and theoretical problems and think critically.
- Communicate effectively both orally and in writing.
- Work effectively independently and in teams.
- Demonstrate compliance with safety, ethical and professional standards of chemistry.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU102	Introduction to Academic English For Science	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00

LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
CHEM111	General Chemistry I	3.00
PHYS105	General Physics I <sup>3</sup>	3.00

3 : Also counts towards the Major

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
CHEM418	Research Project <sup>4</sup>	3.00
4 : Also counts towards the Major		

### Chemistry Major (Req. CH:60)

<b>Required Courses (42.00 hours)</b>		<b>Credit Hours</b>
CHEM112	General Chemistry II	2.00
CHEM115	General Chemistry Lab	1.00
CHEM221	Analytical Chemistry	3.00
CHEM231	Inorganic Chemistry I	3.00
CHEM241	Organic Chemistry I	3.00
CHEM242	Organic Chemistry II	3.00
CHEM245	Organic Chemistry Lab I	1.00
CHEM251	Physical Chemistry I	3.00
CHEM321	Instrumental Analysis I	4.00
CHEM331	Inorganic Chemistry II	3.00
CHEM337	Practical Inorganic Chemistry	1.00
CHEM345	Organic Chemistry Lab II	1.00
CHEM351	Physical Chemistry II	3.00
CHEM355	Physical Chemistry Lab I	1.00
CHEM356	Physical Chemistry Lab II	1.00
CHEM361	Biochemistry	3.00
CHEM419	Internship	6.00

<b>Supporting required Courses Non-Chemistry (15.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
ENG310	Writing for Research	3.00
ITBP112	Introduction To Programming	3.00
MATH110	Calculus II	3.00
PHYS110	General Physics II	3.00

<b>Chemistry Elective Courses (3.00 hours)</b>		<b>Credit Hours</b>
CHEM417	Advanced Laboratory Techniques	1.00
CHEM421	Instrumental Analysis II	2.00

CHEM431	Inorganic Chemistry III	2.00
CHEM445	Spectroscopic Identification of Chemical Compounds	1.00
CHEM451	Physical Chemistry III	2.00
CHEM452	Electrochemistry	2.00

**Elective Courses - Upon the approval of the Department, the student may select a total of 18 Credit Hours from a specific minor + 3 CH Free Electives. (21.00 hours)**

**Credit Hours**

# Department of Geology

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## Bachelor of Science in Geology

The B.Sc. degree program at the geology department is offered for concentration tracks in Applied Geology and in Petroleum Geology. Fundamental principles in geosciences are provided to both tracks through theoretical, laboratory and fieldwork. At the specialization level, students of the applied geology track are given knowledge in disciplines focusing on applications related to economic geology and groundwater resources. In petroleum geology track, the emphasis is given to knowledge in hydrocarbon sources and exploration. The students of both tracks are also given adequate skills in geoinformatics and environmental analysis. Students receive training in research through both preparation of a research project at the final year of their education and participation in the research projects of the department. The preparation of students for work places in private or state companies and agencies is performed through internship, regular visits and projects.

### Program Objectives

- To serve the national interest by graduating students capable to work in the different domains of geosciences.
- Prepare the students with sufficient knowledge of fundamental principles geosciences
- Improve the students' capacity in research in order to prepare them for further postgraduate studies.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply knowledge of basic theoretical concepts and practical models of geosystems.
- Conduct laboratory experiments and analyze results.
- Collect, competently record, and interpret diverse field data: including material sampling, processing and data interpretation to answer basic questions about terrains and their histories.
- Solve problems relevant to the geological disciplines, including assessment of terrains for their material, mineral, water and hydrocarbon resource potential and geohazards.
- Prepare map, geophysical and lithological logs and interpret photographic and digital terrain imagery.
- Accomplish self-management and co-operation in teamwork within the frame of basic safety precautions in the field and laboratory.
- Communicate professionally through both oral presentation and in writing of scientific documents.
- Demonstrate competence in search and review of the scientific literature.

- Evaluate the impact of the exploration for and exploitation of natural resources on the society at local and global scales in terms of managing natural resources, environmental impacts and climate change.
- Apply the guidelines of the profession in respect to scientific integrity and ethics in accordance with current practices.

## Degree Requirements

**Required Credit Hours : minimum 120 hours**  
**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU102	Introduction to Academic English For Science	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

<b>Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)</b>		<b>Credit Hours</b>
AGRB210	Introduction to Agribusiness	3.00
ECON110	Principles of Economics	3.00
HSR140	Introduction to Society & Behavior	3.00
HSR150	Introduction to Government Policy & Urban Structures	3.00
PSY100	Introduction to Psychology	3.00
SOC260	Folklore	3.00
SWK200	Introduction to Social Welfare	3.00

<b>Cluster 3: The Human Community - The Global Experience (3.00 hours)</b>		<b>Credit Hours</b>
AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

<b>Cluster 4: The Natural World - Mathematics (3.00 hours)</b>		<b>Credit Hours</b>
MATH105	Calculus I <sup>2</sup>	3.00
2 : Also counts towards the Major		

<b>Cluster 4: The Natural World - Natural Sciences (6.00 hours)</b>		<b>Credit Hours</b>
CHEM111	General Chemistry I	3.00
PHYS105	General Physics I <sup>3</sup>	3.00
3 : Also counts towards the Major		

<b>Cluster 5: Capstone Experience (4.00 hours)</b>		<b>Credit Hours</b>
GEOL499	Field Geology <sup>4</sup>	4.00
4 : Also counts towards the Major		

### Geology Major

<b>Required Courses (27.00 hours)</b>		<b>Credit Hours</b>
GEOL105	Physical Geology	3.00
GEOA290	Structure Geology & Tectonics	4.00
GEOA320	Mineralogy	4.00
GEOA325	Sedimentology & Stratigraphy	4.00
GEOA372	Geophysics	3.00
GEOA458	Geology Of UAE	3.00
GEOL500	Internship	6.00

<b>Supporting Required Courses Non-Geology (12.00 hours)</b>		<b>Credit Hours</b>
CHEM112	General Chemistry II	2.00
CHEM115	General Chemistry Lab	1.00
ITBP112	Introduction To Programming	3.00
MATH110	Calculus II	3.00
PHYS110	General Physics II	3.00

### Applied Geology Track

<b>Required Courses (20.00 hours)</b>		<b>Credit Hours</b>
BIOC100	Basic Biology I	3.00
GEOA250	Paleontology	4.00
GEOA322	Igneous & Metamorphic Petrology	4.00

GEOA358	Hydrogeology	3.00
GEOA412	Remote Sensing and GIS	3.00
GEOA461	Geochemistry	3.00

<b>Track Elective Courses (3.00 hours)</b>		<b>Credit Hours</b>
GEOA414	Environmental Geology	3.00
GEOA452	Economic Geology	3.00
GEOA462	Hydro Geochemistry	3.00
GEOA490	Mineral Exploration	3.00
GEOA495	Selected Topics	3.00
GEOP453	Petroleum and Subsurface Geology	3.00

### Petroleum Geology Track

<b>Required Courses (20.00 hours)</b>		<b>Credit Hours</b>
CHEM241	Organic Chemistry I	3.00
GEOP413	Petrophysics	3.00
GEOP420	Basin Analysis	3.00
GEOP453	Petroleum and Subsurface Geology	3.00
GEOP463	Geophysical Exploration	3.00
GEOP469	Petroleum Geochemistry	3.00
GEOP499	Research Project	2.00

<b>Track Elective Courses (3.00 hours)</b>		<b>Credit Hours</b>
GEOA414	Environmental Geology	3.00
GEOP495	Selected Topics	3.00
GEOP322	Igneous & Metamorphic Petrology	3.00
GEOP431	Seismic Stratigraphy	3.00
PETE403	Well Logging	3.00

### Required Minor

<b>Upon the approval of the Department, the student may select a total of 18 Credit Hours from a specific minor (18.00 hours)</b>	<b>Credit Hours</b>
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# Department of Mathematical Sciences

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## Bachelor of Science in Mathematics

The heart of the program consists of fundamental courses in the main areas of mathematics (numerical analysis, algebra, analysis), together with a variety of specialized, elective courses. It is complemented by supportive courses from other departments, in addition to the University general education requirements. Opportunities for internship and research are given, preparing students for the job market and for higher studies. With a pedagogy emphasizing students' learning outcomes and encouraging the use of technology, students are aided in developing quantitative skills and an ability to think clearly and critically about complex problems, while communicating results with precision.

### Program Objectives

- Offer a breadth of courses which will allow each student to develop quantitative skills, an ability to think clearly, to be proficient in the use of technology, and to have excellent problem solving skills.
- Foster within each student an aesthetic appreciation for the logical foundation of mathematics.
- Emphasize problem solving strategies in all courses in order to develop each student's capacity for independent use of the contents of the course.
- Foster the development of each student's communication skills.
- Foster the development of each student's learning skills and help them synthesize knowledge in order to move to higher levels of independent learning.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of important concepts and results representing the breadth of mathematical sciences.
- Solve mathematical problems in rigorous, logically deductive, and critical way ranging from formal proofs to computational approaches.
- Employ technology to assist in solving and investigating mathematical problems and presenting corresponding results.
- Formulate real-life and interdisciplinary problems mathematically.
- Structure mathematical arguments in a clear well-organized and logical way.
- Communicate mathematical ideas effectively through presentations and reports.
- Work efficiently in groups on mathematical projects.
- Search mathematical literature in order to acquire new knowledge and attempt new projects to motivate long-life learning.

- Prepare a job portfolio demonstrating various professional career competences (ethics, technology, communication, group work, critical thinking, and self-learning).

## Degree Requirements

**Required Credit Hours : minimum 120 hours**  
**General Education (Req. CH:39)**

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
FOED102	Professional Ethics in Education	3.00
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU102	Introduction to Academic English For Science	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00
1 : IBLC - Inquiry based learning courses must be taken within first 30 credit hours		

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00

HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00
LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

PSY313	Educational Psychology <sup>2</sup>	3.00
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<sup>2</sup> : Also counts towards the Major

### Cluster 3: The Human Community - The Global Experience (N/A)

Credit Hours

AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

MATH105	Calculus I <sup>3</sup>	3.00
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<sup>3</sup> : Also counts towards the Major

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

PHYS105	General Physics I	3.00
PHYS110	General Physics II <sup>4</sup>	3.00

<sup>4</sup> : Also counts towards the Major

<b>Cluster 5: Capstone Experience (3.00 hours)</b>		<b>Credit Hours</b>
MATH495	Research Project <sup>5</sup>	3.00
5 : Also counts towards the Major		

### Mathematics Major (Req. CH:75)

<b>Required Courses (36.00 hours)</b>		<b>Credit Hours</b>
MATH110	Calculus II	3.00
MATH140	Linear Algebra I	3.00
MATH210	Calculus III	3.00
MATH215	Introduction to Analysis	3.00
MATH275	Ordinary Differential Equations	3.00
MATH310	Real Analysis	3.00
MATH315	Complex Analysis I	3.00
MATH320	Numerical Analysis I	3.00
MATH340	Abstract Algebra 1	3.00
MATH205	Set Theory and Logic	3.00
MATH246	Number Theory	3.00
MATH372	Partial Differential Equations	3.00

<b>Supporting Required Courses Non-Mathematics (15.00 hours)</b>		<b>Credit Hours</b>
ENG310	Writing for Research	3.00
ITBP112	Introduction To Programming	3.00
STAT230	Principles of Probability	3.00
MATH500	Internship	6.00

<b>Supporting Elective Courses Non-Mathematics (12.00 hours)</b>		<b>Credit Hours</b>
ARB100	Styles of Literary Expression	3.00
ARB110	Introduction to Syntax & Morphology	3.00
ENG250	English Grammar & Usage	3.00
ITBP119	Algorithms and Problem Solving	3.00
ITBP219	Object Oriented Programming	3.00
STAT210	Probability and Statistics	3.00
STAT340	Mathematical Statistics	3.00
PHYS235	Waves and Optics	3.00
PHYS262	Classical Mechanics	3.00

<b>Mathematics Elective Courses (12.00 hours)</b>		<b>Credit Hours</b>
MATH260	Foundation of Geometry	3.00
MATH321	Linear Programming	3.00
MATH341	Linear Algebra II	3.00
MATH342	Graph Theory	3.00
MATH344	Introduction to Cryptography and Coding Theory	3.00
MATH374	Dynamical Systems and Applications	3.00
MATH391	Financial Mathematics	3.00
MATH413	Complex Analysis II	3.00
MATH422	Numerical Analysis II	3.00
MATH462	Introduction to Topology	3.00
MATH471	Control Theory & Applications	3.00
MATH470	Mathematical Modeling	3.00
MATH312	Advanced Calculus	3.00
MATH443	Abstract Algebra 2	3.00

<b>Free Electives (6.00 hours)</b>	<b>Credit Hours</b>
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# Department of Physics

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## Bachelor of Science in Physics

The Department of Physics offers a rich and comprehensive program of study leading to the B.S. degree in Physics. The department aims at the training and graduating of specialists in physics to meet the manpower need for the country's development. The Department offers a well-designed and updated physics curriculum enabling the graduates to participate effectively in their work place or continue their postgraduate studies and conduct research. Physics students are required to take additional courses in mathematics, science, general education, and information technology to further develop their knowledge, background, and skills.

### Program Objectives

- Knowledge of fundamental concepts and theories in various fields of physics.
- Disciplinary skills, abilities and competencies.
- The right attitude and correct behavior towards Learning and National priorities.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain qualitatively the basic concepts of physics.
- Express physical concepts mathematically
- Integrate the acquired knowledge of various physical disciplines
- Apply mathematical skills to solve physical problems correctly.
- Use skills in experimental physics to apply physical concepts.
- Demonstrate computational Physics solving skills and the capable use of information technology.
- Communicate effectively in both oral and written forms.
- Engage in research activities related to national interests.
- Work effectively, responsibly, and ethically in team-oriented projects.
- Think critically and logically.

## Degree Requirements

Required Credit Hours : minimum 120 hours  
General Education (Req. CH:39)

<b>Cluster 1: Values to Live By - Islam (3.00 hours)</b>		<b>Credit Hours</b>
ISLM100	Islamic Culture	3.00

<b>Cluster 1: Values to Live By - Ethics (3.00 hours)</b>		<b>Credit Hours</b>
PHI121	Fundamentals of Environmental Ethics	3.00
PHI122	International Ethics	3.00
PHI226	Human Rights Theory	3.00
PHIL120	Principles of Professional Ethics	3.00

<b>Cluster 2: Skills for Life - English Communication Skills (3.00 hours)</b>		<b>Credit Hours</b>
ESPU102	Introduction to Academic English For Science	3.00

<b>Cluster 2: Skills for Life - Information Literacy (3.00 hours)</b>		<b>Credit Hours</b>
GEIL101	Information Literacy	3.00

<b>Cluster 2: Skills for Life - Thinking Skills (3.00 hours)</b>		<b>Credit Hours</b>
HSS110	Scientific Research Skills	3.00
ITBP119	Algorithms and Problem Solving	3.00
PSY105	Creative & Innovative Thinking Skills	3.00
PHI180	Critical Thinking <sup>1</sup>	3.00

<sup>1</sup> : IBLC - Inquiry based learning courses must be taken within first 30 credit hours

<b>Cluster 3: The Human Community - Emirates Society (3.00 hours)</b>		<b>Credit Hours</b>
HSS105	Emirates Studies	3.00

<b>Cluster 3: The Human Community - Humanities/Fine Arts (3.00 hours)</b>		<b>Credit Hours</b>
ARCH340	History and Theory of Architecture	3.00
HIS133	Introduction to Art History	3.00
HSR120	Introduction to Heritage & Culture	3.00
HSR130	Introduction to Language & Communication	3.00
LIT150	Introduction to Literature	3.00

LNG100	Introduction to Linguistics	3.00
LNG110	Language, Society & Culture	3.00
MSC200	Introduction to Mass Media	3.00
MSC240	World and Arab Media	3.00
PHI101	Introduction to Philosophy	3.00
PHI270	Philosophy of Education	3.00
PHI271	History and Philosophy of Science	3.00
TRS200	Introduction to Translation	3.00

### Cluster 3: The Human Community - Social and Behavioral Sciences (3.00 hours)

Credit Hours

PSY313	Educational Psychology <sup>2</sup>	3.00
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<sup>2</sup> : Also counts towards the Major

### Cluster 3: The Human Community - The Global Experience (3.00 hours)

Credit Hours

AGRB360	Global Agri-food Trade	3.00
ARCH346	Contemporary World Architecture	3.00
BIOE240	Principles of Environmental Science	3.00
GEO200	World Regional Geography	3.00
HIS120	Arab & Islamic Civilization	3.00
HIS121	World History: Origins to 1500	3.00
HIS125	Contemporary Civilization	3.00
PSG250	Principles of International Relations	3.00

### Cluster 4: The Natural World - Mathematics (3.00 hours)

Credit Hours

MATH105	Calculus I <sup>3</sup>	3.00
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<sup>3</sup> : Also counts towards the Major

### Cluster 4: The Natural World - Natural Sciences (6.00 hours)

Credit Hours

PHYS105	General Physics I	3.00
PHYS110	General Physics II <sup>4</sup>	3.00

<sup>4</sup> : Also counts towards the Major

### Cluster 5: Capstone Experience (3.00 hours)

Credit Hours

PHYS494	Research Project <sup>5</sup>	3.00
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<sup>5</sup> : Also counts towards the Major

## Physics Major

<b>Required Courses (42.00 hours)</b>		<b>Credit Hours</b>
PHYS135	General Physics Lab I	1.00
PHYS140	General Physics Lab II	1.00
PHYS205	Intermediate Physics Lab I	1.00
PHYS210	Intermediate Physics Lab II	1.00
PHYS220	Thermal Physics	3.00
PHYS235	Waves and Optics	3.00
PHYS250	Modern Physics	3.00
PHYS255	Mathematical Physics	3.00
PHYS262	Classical Mechanics	3.00
PHYS312	Statistical Physics	2.00
PHYS335	Electromagnetic Theory	3.00
PHYS355	Quantum Mechanics	3.00
PHYS500	Internship	6.00
PHYS231	Electronics Fundamentals	3.00
PHYS470	Solid State Physics	3.00
PHYS483	Introductory Nuclear Physics	3.00

## Compulsory Supporting

<b>Supporting Required Courses Non-Physics (18.00 hours)</b>		<b>Credit Hours</b>
CHEM111	General Chemistry I	3.00
ITBP112	Introduction To Programming	3.00
MATH110	Calculus II	3.00
MATH140	Linear Algebra I	3.00
MATH275	Ordinary Differential Equations	3.00
STAT210	Probability and Statistics	3.00

<b>Elective Physics Courses (9.00 hours)</b>		<b>Credit Hours</b>
PHYS330	Computational Physics	3.00
PHYS345	Laser Physics	3.00
PHYS390	Introduction to Astrophysics	3.00
PHYS495	Selected Topics	3.00
PHYS385	Radiation Physics	3.00

PHYS430	Electromagnetic Theory II	3.00
PHYS475	Semiconductor Physics	3.00
PHYS450	Quantum Mechanics II	3.00

<b>Supporting Elective Courses Non-Physics : the student may select a total of 6 Credit Hours (6.00 hours)</b>		<b>Credit Hours</b>
GEOL105	Physical Geology	3.00
MATH210	Calculus III	3.00
BIOE240	Principles of Environmental Science	3.00
CSBP400	Modeling & Simulation	3.00
ENG310	Writing for Research	3.00
CHME444	Renewable Energy Sources	3.00
MGMT200	Fundamentals of Management	3.00

<b>Free Electives (6.00 hours)</b>	<b>Credit Hours</b>
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