

## Curriculum Structure and Credit Hours

The B.Sc. degree in Information Technology requires the completion of 120 credit hours. In addition, the student is required to complete an internship program for 16 weeks (at least 30 contact hours per week) after completing 90 credit hours. This internship experience is equivalent to three credit hours making the total completion requirements 123 credit hours.

## Program Structure

The B.Sc. degree in Information Technology/ Networking and Security (ITNS) requires the completion of 123 credit hours distributed according to the following plan:

Type of Courses	Credit Hours
1. University General Education Courses	
(a) University Compulsory Courses	18
(b) University Elective Courses	12
2. Information Technology Program Common Compulsory Courses	
(a) Information Technology Core Courses	63
(b) Internship	3
3. Information Technology Program Concentration Courses	18
4. Information Technology Program Elective Courses	9
<b>Total Credit Hours</b>	<b>123</b>

## Program Courses

## University General Education Courses

(a) University Compulsory Courses (18 Cr. Hrs.)

Course No.	Course Title	Th.	La b.	Tut .	Cr. Hrs.	Prerequisite
ENG211	Public Speaking	3	0	0	3	-
INN311	Innovation & Sustainable Entrepreneurship	3	0	0	3	Year 3
THI212	Critical Thinking and Quantitative Reasoning	3	0	0	3	-
STA114	General Statistics	2	2	0	3	-
EMS112	Emirates Studies	3	0	0	3	-
ENG114	Advanced English Writing	3	0	0	3	-

(b)University Elective Courses (12 Cr. Hrs.)

Course Code	Course Title	Th.	La b.	Tut .	Cr. Hrs.	Prerequisite
<b>1. Humanities / Arts (3 Credit Hours)</b>						

ART111	Introduction to Art	3	0	0	3	-
FRE211	Conversational French	3	0	0	3	-
HPS111	History and Philosophy of Science	3	0	0	3	-
LAW106	Human Rights	3	0	0	3	-
ISL114	Islamic Culture	3	0	0	3	-
WLT115	World Literature	3	0	0	3	-
COM103	Introduction to Film Studies	3	0	0	3	-
<b>2. Natural Sciences (3 Credit Hours)</b>						
AST211	Astronomy	3	0	0	3	-
BIO111	General Biology	2	2	0	3	-
CHM111	General Chemistry	2	2	0	3	-
PHY111	General Physics	3	0	0	3	-
FUT101	The Science of the Future	3	0	0	3	-
ENV113	Science of Energy and Global Environment	3	0	0	3	-
GEO102	Planet Earth	3	0	0	3	-
<b>3. Social or Behavioral Sciences (6 Credit Hours)</b>						
PSY111	General Psychology (English)	3	0	0	3	-
INF112	Media Culture	3	0	0	3	-
THI211	Critical Thinking	3	0	0	3	-
SSW111	Social Responsibility	3	0	0	3	-
LAW112	Works Ethics	3	0	0	3	-
LED111	Leadership and Team Building	3	0	0	3	-
CRM101	Introduction to Criminology	3	0	0	3	-

#### Information Technology Program Common Compulsory Courses (66 Cr. Hrs.)

Course No.	Course Title	Th.	La b.	Tut .	Cr. Hrs.	Prerequisite
INT100	Introductory Programming	2	2	2	3	-
INT101	Calculus for Information Technology	3	0	2	3	-
INT103	Information Technology in Business	3	0	0	3	-
INT201	Object Oriented programming	2	2	2	3	INT100
INT202	Discrete Mathematics	3	0	2	3	INT101
INT203	Computer Organization	3	0	0	3	INT103
INT205	Fundamentals of Data Communications and Networking	2	2	0	3	INT203
INT206	Fundamentals of Web Systems	2	2	0	3	INT201

INT209	Data Structures	3	0	2	3	INT201, INT202
INT301	Operating Systems	2	2	0	3	INT203
INT302	Database Management Systems	2	2	0	3	INT201
INT303	Fundamentals of Information Security	3	0	0	3	INT205
INT305	Fundamentals of Software Engineering	3	0	0	3	INT209
INT306	Computer Ethics and Professional Practices	3	0	0	3	INT303
INT307	Information Technology Project Management	3	0	0	3	INT305/ INT302
INT309	Cloud Computing	2	2	0	3	INT303
INT313	User Interface Design	3	0	0	3	INT201
INT322	Web Technologies	2	2	0	3	INT206
INT323	Big Data Analytics & Technologies	2	2	0	3	INT302
INT401	Information Technology Project	1	4	0	3	90 Cr. Hrs.
INT402	Information Technology Internship	16 weeks-Sector normal hours min 30 per week			3	90 Cr. Hrs.
INT430	Artificial Intelligence	2	2	0	3	INT302

**Information Technology Program Concentration Specific Compulsory Courses**  
**Networking and Security Concentration Compulsory Courses (18 Cr. Hrs.)**

Course No.	Course Title	Th.	Lab .	Tut .	Cr. Hrs.	Prerequisite
INT311	Advanced Computer Networks	2	2	0	3	INT205
INT312	Network Security	2	2	0	3	INT303
INT414	Wireless Networks	2	2	0	3	INT311
INT419	Network Design and Management	2	2	0	3	INT311
INT432	Ethical Hacking	2	2	0	3	INT312
INT436	Cybersecurity Operations & Analytics	2	2	0	3	INT312

**Information Technology Program Elective Courses (9 Credit Hours)**

Course No.	Course Title	Th.	Lab .	Tut.	Cr. Hrs.	Prerequisite
INS307	Business Process Management	3	0	0	3	INT305
INS309	Knowledge Management	3	0	0	3	INT302
INS402	Business Intelligence	3	0	0	3	INT302
INT207	Multimedia Technology	2	2	0	3	INT100
INT321	Database Administration	2	2	0	3	INT302
INT403	Selected Topics in Information Technology	3	0	0	3	INT302

