

# BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY (BSIT)

## BSIT - FIRST YEAR ( 32 CREDITS)

### 1<sup>ST</sup> SEMESTER

COURSE	CODE	COURSE TITLE	LEC.	LAB.	CRE.	PREREQUISITE
ARAB	101	Composition for Native Speakers of Arabic I	3	0	3	
ENGL	101	Academic English I	3	0	3	(ENGL 052 & ENGL 055) or passing placement test
ITCS	101	Introduction to Computers & IT	2	2	3	
MATH	101	Calculus I	3	0	3	MATH 053 or passing placement test
HUMR	101	Principles of Human Rights	2	0	2	
PHYS	101	General Physics I	3	0	3	MATH 053 or passing placement test
<b>TOTAL PER SEMESTER</b>			16	2	17	

### 2<sup>ND</sup> SEMESTER

COURSE	CODE	COURSE TITLE	LEC.	LAB.	CRE.	PREREQUISITE
ENGL	102	Academic English II	3	0	3	ENGL 101
HIST	121	Modern History of Bahrain	3	0	3	
ITCS	122	Introduction to Programming Techniques	2	2	3	ITCS 101
MATH	102	Calculus II	3	0	3	MATH 101
STAT	101	Introduction to Statistics	3	0	3	MATH 053 or passing placement test
<b>TOTAL PER SEMESTER</b>			14	2	15	

## BSIT - SECOND YEAR ( 33 CREDITS)

### 1<sup>ST</sup> SEMESTER

COURSE	CODE	COURSE TITLE	LEC.	LAB.	CRE.	PREREQUISITE
ENGL	201	Academic English III	3	0	3	ENGL 102
MATH	202	Calculus III	3	0	3	MATH 102
ITCS	201	Object-Oriented Programming I	2	2	3	ITCS 122
XXXX	XXX	Free Elective I	3	0	3	
ITCS	209	Discrete Structures	3	0	3	MATH 102
ITMS	205	Internet Applications and Services	2	2	3	ITCS 101
<b>TOTAL PER SEMESTER</b>			16	4	18	

### 2<sup>ND</sup> SEMESTER

COURSE	CODE	COURSE TITLE	LEC.	LAB.	CRE.	PREREQUISITE
ENGL	202	Academic English IV	3	0	3	ENGL 201
ITCS	221	Object-Oriented Programming II	2	2	3	ITCS 201
ITCS	214	Computer Systems	3	0	3	ITCS 101
ITCS	222	Visual Programming	2	2	3	ITCS 122
ITCS	224	Data Structures	2	2	3	ITCS201
<b>TOTAL PER SEMESTER</b>			12	6	15	

## BSIT - THIRD YEAR ( 36 CREDITS)

### 1<sup>ST</sup> SEMESTER

COURSE	CODE	COURSE TITLE	LEC.	LAB.	CRE.	PREREQUISITE
ITCS/MS	3XX	Major Elective I	2	2	3	
ITCS	313	Software Engineering I	2	2	3	ITCS 201
ITCS	323	Database Systems: Design and Application	2	2	3	ITCS 222
ITMS	302	Human Computer Interaction	2	2	3	ITCS 222
HU/SS	XXX	Humanities/Social Sciences	3	0	3	
<b>TOTAL PER SEMESTER</b>			11	8	15	

### 2<sup>ND</sup> SEMESTER

COURSE	CODE	COURSE TITLE	LEC.	LAB.	CRE.	PREREQUISITE
ETHC	392	Ethics and Professional Practice in IT and Engineering	3	0	3	Completion of at least 66 Credits
ITCS	327	Software Engineering II	3	0	3	ITCS 313
ECTE	329	Computer Networks	2	2	3	ITCS 214
ITCS	336	Database Administration I	2	2	3	ITCS 323
ITCS/MS	3XX	Major Elective II	2	2	3	
XXXX	XXX	Free Elective II	3	0	3	
<b>TOTAL PER SEMESTER</b>			15	6	18	

### SUMMER

COURSE	CODE	COURSE TITLE	LEC.	LAB.	CRE.	PREREQUISITE
INTR	463	BSIT Internship	0	0	3	Completion of at least 90 credit hours with CGPA ≥2.00
<b>TOTAL PER SEMESTER</b>			0	0	3	

## BSIT - FOURTH YEAR ( 33 CREDITS)

### 1<sup>ST</sup> SEMESTER

COURSE	CODE	COURSE TITLE	LEC.	LAB.	CRE.	PREREQUISITE
ITCS	404	Information Security Engineering	2	2	3	ITCS 327
ITCS	401	Software Project Management	2	2	3	ITCS 327
ITCS	409	Operating Systems	3	0	3	ITCS 214
IERM	498	Research Methods in Information Technology & Engineering	3	0	3	Completion of at least 90 credits
ITCS /ECTE	4XX	Major Elective III	2	2	3	
ITMA	401	E-Commerce	3	0	3	ITCS 101
<b>TOTAL PER SEMESTER</b>			15	6	18	

### 2<sup>ND</sup> SEMESTER

COURSE	CODE	COURSE TITLE	LEC.	LAB.	CRE.	PREREQUISITE
ITCS	425	Web Engineering	2	2	3	ITMS205 & ITCS 327
ITCS	422	Distributed Systems	2	2	3	ITCS 409
ITCS /ECTE	4XX	Major Elective IV	2	2	3	
ITCS	427	Mobile Computing	2	2	3	ECTE 329& ITCS 221
ITCS	499	Major Project	0	6	3	IERM 498 & ETHC 392
<b>TOTAL PER SEMESTER</b>			8	14	15	

# BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY (BSIT)

## LIST OF MAJOR ELECTIVE COURSES

COURSE	CODE	COURSE TITLE	LEC.	LAB.	CRE.	PREREQUISITE
ITCS	435	Database Administration II	2	2	3	ITCS 336
ITCS	303	Design and Analysis of Algorithms	2	2	3	ITCS 224 & ITCS209
ITCS	341	System Administration I	2	2	3	ITCS 214
ITCS	441	System Administration II	2	2	3	ITCS 341
ITCS	413	Intelligent Systems	2	2	3	ITCS 303
ITMS	351	Graphics and Multimedia	2	2	3	ITMS205
ITCS	335	IT Infrastructure	2	2	3	ITCS214
ITCS	442	Virtualization	2	2	3	ITCS335
ITCS	443	Security Services	2	2	3	ITCS404
ITCS	444	Cloud Services Implementation	2	2	3	ITCS442
ECTE	421	Network Design and Security	2	2	3	ECTE329

## REQUIREMENTS

### UNIVERSITY REQUIREMENTS

COURSE	CODE	COURSE TITLE
ARAB	101	Arabic
ENGL	101	Academic English I
ITCS	101	Introduction to Computers & IT
HIST	121	Modern History of Bahrain
HUMR	101	Principles of Human Rights
ENGL	102	Academic English II
STAT	101	Introduction to Statistics

### COLLEGE REQUIREMENTS

COURSE	CODE	COURSE TITLE
MATH	101	Calculus I
ENGL	202	Academic English IV
ITCS	209	Discrete Structures
ITCS	122	Introduction to Programming Techniques
MATH	102	Calculus II
PHYS	101	General Physics I
ENGL	201	Academic English III

### DEPARTMENT REQUIREMENTS

COURSE	CODE	COURSE TITLE
ITCS	224	Data Structures
MATH	202	Calculus III
ITCS	222	Visual Programming
ITMS	205	Internet Applications and Services
ITCS	201	Object-Oriented Programming I
ITCS	221	Object-Oriented Programming II
ITCS	214	Computer Systems
ITCS	313	Software Engineering I
ITCS	323	Database Systems: Design and Application
ITMS	302	Human Computer Interaction
ETHC	392	Ethics and Professional Practice in IT and Engineering
ITCS	327	Software Engineering II
ITCS	422	Distributed Systems
ITCS	336	Database Administration I
INTR	463	BSIT Internship
ITCS	404	Information Security Engineering
ITCS	401	Software Project Management
ITCS	409	Operating Systems
ITMA	401	E-Commerce
IERM	498	Research Methods in IT & Engineering
ECTE	329	Computer Networks
ITCS	425	Web Engineering
ITCS	427	Mobile Computing
ITCS	499	Major Project