

Program Name STUDY PLAN

SPECIALIZATION: NCS - Applied Bachelor (AB)

Total Credits Hours = 183 C.H.

1st Semester							2nd Semester							Summer									
Description (Math and Sciences, Humanities, Engineering Technologyetc.)							Description (Math and Sciences, Humanities, Engineering Technologyetc.)							Description (Math and Sciences, Humanitiesetc.)									
No.	Course	Prerequisite	L	B	T	CH	CR	No.	Course	Prerequisite	L	B	T	CH	CR	No.	Course	Prerequisite	L	B	T	CH	CR
MATH-100	PreCalculus *	NA	3	2	2	7	4	ICT-120	Object Oriented Programming in Java	ICT-110	2	2	2	6	3	ICT-131	Logic Design & Computer Organization	ENG-125	2	2	2	6	3
ICT-110	Intro to Programming & Problem Solving	NA	2	2	2	6	3	ICT-121	Intro to Computer Networks	ICT-110	2	2	2	6	3	ICT-132	Fundamentals of Information Security	ICT-121	2	2	2	6	3
HUM-xxx	Humanities - Elective (I)	NA	2	2	2	6	3	MATH-111	Calculus I	MATH-100	2	2	2	6	3	ICT-122	Discrete Mathematics	MATH-111	3	0	2	6	3
HUM-xxx	Humanities - Elective (II)	NA	2	2	2	6	3	ENG-125	Intro to Computer Electronics	NA	2	2	2	6	3	ENGL-211	Public Speaking (Blended L.)	ENGL122	1	0	2	3	1
ENGL-120	English Skills	NA	3	0	2	5	0	ENG-122	Academic English 2	ENGL121	3	0	2	5	3	ENGL-212	Literature Review (Blended L.)	ENGL122	1	0	2	3	1
ENGL-121	Academic English 1	ENGL120	3	0	2	5	3								ENGL-213	Report Writing (Blended L.)	ENGL122	1	0	2	3	1	
Total							Total							Total									

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No.	Course	Prerequisite	L	B	T	CH	CR	No.	Course	Prerequisite	L	B	T	CH	CR	No.	Course	Prerequisite	L	B	T	CH	CR
ICT-210	Introduction to Software Security	ICT-120 & ICT-132	2	2	2	6	3	ICT-220	Operating Systems Security	ICT-131 & ICT-132	2	2	2	6	3	NCS-230	Routing and Switching - OCT 1	ICT-121	1	6	0	7	2
ICT-211	Data Structure and Algorithms	ICT-120 & ICT-122	2	2	2	6	3	SSD-220	Web Programming and Security	ICT-132 & ICT-212	2	2	2	6	3	NCS-236	Secure Network Design - OCT 1	NCS-217	1	6	0	7	2
NCS-217	Network Security	ICT-121	2	2	2	6	3	SSA-222	Information Systems Security	ICT-132	2	2	2	6	3	NCS-232	Network Security - OCT 1	NCS-217	1	6	0	7	2
ICT-212	Intro to Database Systems	ICT-120	2	2	2	6	3	NCS-220	Ethical Hacking and Digital Forensics	NCS-217	2	2	2	6	3	NCS-233	Ethical Hacking and Dig. Forensics - OCT 1	NCS-220	1	6	0	7	2
								NCS-222	Intro to Applied Cryptography	ICT-132	2	2	2	6	3	NCS-234	Mobile Programming and Security- OCT 1	ICT-132 & ICT-131	1	6	0	7	1
															NCS-235	Penetration Testing in-Depth - OCT 1	NCS-220	1	6	0	7	1	
Total							Total							Total									

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Description							Description							Description									
No.	Course	Prerequisite	L	B	T	CH	CR	No.	Course	Prerequisite	L	B	T	CH	CR	No.	Course	Prerequisite	L	B	T	CH	CR
NCS-318	Fundamentals of Storage Networking	ICT-121	2	2	0	4	3	NCS-326	Perimeter Protection	NCS-235	2	2	0	4	3	NCS-336	Linux-Unix Security Administration- OCT II	ICT-220	1	6	0	7	2
SSA-317	Client/Server Security Admin	ICT-220 & NCS-217	2	2	0	4	3	SSD-327	Malware Analysis Tools and Techniques	SSD-220 & NCS-233	2	2	0	4	3	NCS-341	MS Windows Server Security Administration- OCT II	ICT-220	1	6	0	7	2
NCS-316	Wireless Network Security	NCS-217	2	2	0	4	3	NCS-327	Advanced Network Security	NCS-232	2	2	0	4	3	NCS-337	Advanced Routing and Switching- OCT II	NCS-230	1	6	0	7	2
NCS-317	Cloud and Infrastructure Security	NCS-217	2	2	0	4	3	NCS-328	Advanced Web Security	SSD-220	2	2	0	4	3	NCS-338	Network Border Control- OCT II	NCS-326	1	6	0	7	2
HUM-402	Creativity, Innovation and Entrepreneurship	NA	3	0	0	3	3	NCS-329	InfoSec Project Management	SSA-222	2	0	2	4	2	NCS-339	Intrusion Detection & Response - OCT II	NCS-327	1	6	0	7	1
															NCS-342	Database Server Security- OCT II	ICT-212 & SSA-333	1	6	0	7	1	
Total							Total							Total									

1st Semester							2nd Semester							Summer									
Description							Description							Description									
No.	Course	Prerequisite	L	B	T	CH	CR	No.	Course	Prerequisite	L	B	T	CH	CR	No.	Course	Prerequisite	L	B	T	CH	CR
NCS-410	Advanced Cryptography	NCS-222	2	2	0	4	3	NCS-420	Incident Handling and Response	NCS-413	2	2	0	4	3	NCS-430	On Job Training (Internship)	Dept. Approval					6
NCS-411	Firewall and Intrusion Analysis	NCS-326	2	2	0	4	3	NCS-421	Information Assurance & Security Manag.	SSA-222	2	2	0	4	3								
NCS-412	Adv Pen Testing & Ethical Hacking	NCS-235	2	2	0	4	3	NCS-422	Ethics, Law and Policy in Cyberspace	SSA-222	3	0	0	3	3								
NCS-413	Risk Analysis and Management	SSA-222	3	0	0	3	3	NCS-423	Graduation Project II	NCS-414	1	4	0	5	3								
NCS-414	Graduation Project I	Dept. Approval	1	2	0	3	2	NCS-xxx	Tech. Elective Course-II	Elective	2	2	0	4	3								
NCS-xxx	Tech. Elective Course-I	Elective	2	2	0	4	3																
Total							Total							Total									

NOTES:

- HUMxxx Humanities Elective to be selected after consultation with the advisor
- Pre-requisite for Calculus I (MATH-111): placement exam > 70%, or precalculus MATH100
- * MATH-100 - Number of credits(4) is not counted for Graduation requirements
- Students can select their specialization at end of 2nd Semester of 2nd year
- NCSxxx Network and Cyber Security Elective to be taken from ISET advanced courses after consultation with the advisor
- Pre-requisite for NCS-414 are: Completion of 110 credits and eGPA ≥ 2.0
- Pre-requisites for NCS-430: Completion of at least 140 credits

Major (SSD-xxx) Technical Electives (6 credits)				
Code	Course Title	PREREQ	CR	
SSD-415	Homeland Security	NCS-220	2,2,0	3
SSD-416	Security Governance and Compliance	SSA-222	3,0,0	3
SSD-417	Security Architectures and Models	SSA-222	3,0,0	3
SSD-418	Software Security Trends	SSD-341	2,2,0	3
SSD-419	Human Computer Interaction Design	SSD-342	2,2,0	3
SSD-425	Critical SW Security Controls & Strndrs	SSD-411	2,2,0	3
SSD-426	Data Mining and Information Retrieval	SSD-316	3,0,0	3
SSD-427	Privacy in a networked world	SSA-222	3,0,0	3
Humanities (HUM-xxx) Electives (6 credits)				
Code	Course Title (credit hours)			
HUM-110	Life-Long Learning Skills (3 cr.)			
HUM-111	Islamic Culture (3cr.)			
HUM112	Emirates Society & Culture (3 cr.)			

HUM-211	Arabic Communication Skills (3 cr.)
HUM-212	Applied Research & Development Skills (3 cr.)