

Information Security Engineering Technology

SPECIALIZATION: Network and Cyber Security - Diploma (HD)

Total Credits Hours: 111 C.H.

Year 1																								
1st Semester					2nd Semester					Summer														
Description (Math and Sciences, Humanities, Engineering Technologyetc)																								
No.	Course	Pre-requisit	L	B	T	CH	CR	No.	Course	Pre-requisit	L	B	T	CH	CR	No.	Course	Pre-requisit	L	B	T	CH	CR	
MATH1001	Precalculus (W.B.)		3	0	2	5	3	ICT1201	Object Oriented Programming in Java	ICT1001	2	2	1	5	3	ICT1301	Fundamentals of Information Security	ICT1202	2	2	0	4	3	
ICT1001	Introduction to Programming & Problem Solving (W.B.)		2	2	2	6	3	ICT1202	Intro to Computer Networks	ICT1001	2	2	1	5	3	ENGL101	Academic English 2	ENGL101	3	0	2	5	3	
ENGL1001	English Skills		3	0	2	5	0	MATH1011	Calculus I (W.B.)	MATH1001	2	2	2	6	3									
HUM1002	Emirates Society & Culture (W.B.)		3	0	2	5	3	ENGL1011	Academic English 1		3	0	2	5	3									
HUM1001	Islamic Culture (W.B.)		3	0	2	5	3	PHYS1011	Physics I (W.B.)		3	0	2	5	3									
ENGL1011	Intro to Computer Electronics		2	2	2	6	3	PHYS1012	Physics 101P		0	2	0	2	1									
Total			16	4	12	32	15	Total			12	8	8	28	16	Total			5	2	2	9	6	

Year 2																							
1st Semester					2nd Semester					Summer													
Description (Math and Sciences, Humanities, Engineering Technologyetc)																							
No.	Course	Pre-requisit	L	B	T	CH	CR	No.	Course	Pre-requisit	L	B	T	CH	CR	No.	Course	Pre-requisit	L	B	T	CH	CR
ICT2101	Discrete Mathematics	MATH110	3	0	2	5	3	ICT2201	Data Structure and Algorithms	ICT1201,10	2	2	1	5	3	NCS2301	Routing and Switching - OCT 1	ICT1202	0	5	0	5	1
NCS2101	Network Security	ICT1202	2	2	0	4	3	ICT2202	Operating Systems Security	ICT2103,11	2	2	0	4	3	NCS2302	Secure Network Design - OCT 1	NCS2101	0	5	0	5	1
ICT2102	Intro to Database Systems	ICT1201	2	2	0	4	3	SSD2201	Web Programming and Security	ICT1301,10	2	2	0	4	3	NCS2303	Network Security - OCT 1	NCS2101	0	5	0	5	1
ENGL2011	Public Speaking (Blended L.)	ENGL101	1	0	2	3	1	NCS2201	Ethical Hacking and Pen. Testing	NCS2101	2	2	0	4	3	NCS2304	Ethical Hacking and Pen. Testing - OCT 1	NCS2201	0	5	0	5	1
ENGL2012	Literature Review (Blended L.)	ENGL101	1	0	2	3	1	ISET2201	Applied Cryptography	ICT1301	2	2	0	4	3	NCS2305	Web and Database Security- OCT 1	NCS2101	0	5	0	5	1
ENGL2013	Report Writing (Blended L.)	ENGL101	1	0	2	3	1	ICT2203	Introduction to Software Security	ICT1201,10	2	2	0	4	3	NCS2306	Penetration Testing in-Depth - OCT 1	NCS2201	0	5	0	5	1
ICT2103	Logic Design & Computer Organization	ENGL101	2	2	1	5	3																
Total			12	6	9	27	15	Total			12	12	1	25	18	Total			0	30	0	30	6

Year 3																							
1st Semester					2nd Semester					Summer													
Description (Math and Sciences, Humanities, Engineering Technologyetc)																							
No.	Course	Pre-requisit	L	B	T	CH	CR	No.	Course	Pre-requisit	L	B	T	CH	CR	No.	Course	Pre-requisit	L	B	T	CH	CR
NCS3101	Fundamentals of Storage Networking	ICT1202	2	2	0	4	3	NCS3201	Perimeter Protection	NCS2306	2	2	0	4	3	NCS3301	Linux/Unix Security Administration (OCT 4I)	ICT2202	0	5	0	5	1
NCS3102	Wireless Network Security	NCS2101	2	2	0	4	3	SSD3201	Malware Analysis Tools and Techniques	NCS2304,3	2	2	0	4	3	NCS3302	Server Security Administration - OCT II	ICT2202	0	5	0	5	1
NCS3103	Security Protocols in-depth	NCS2101	2	2	0	4	3	NCS3204	Emerging Trends in Network Security		2	2	0	4	3	NCS3303	Advanced Routing and Switching- OCT II	NCS2101	0	5	0	5	1
NCS3104	Cloud Security	NCS2101	2	2	1	5	3	NCS3203	Fundamentals of Digital Forensics	NCS2101	2	2	0	4	3	NCS3304	Network Perimeter Protection- OCT II	NCS3201	0	5	0	5	1
ISET3101	InfoSec Project Management (Blended L.)	ICT1301	2	0	0	2	2	NCS3205	Capstone Project		1	4	0	5	3	NCS3305	Intrusion Detection & Response - OCT II	NCS3201	0	5	0	5	1
Total			10	8	1	19	14	Total			9	12	0	21	15	Total			0	30	0	30	6

NOTES:

Pre-requisite for Calculus I (MATH-101): placement exam > 70%, or precalculus MATH100

Students can select their specialization at end of 2nd Semester of 2nd year