

برنامـج تكنولوجيا المعلومات Information Technology

هيكل البرنامج

Program Structure

First Year

1 st Semester						
No.	course	Credit hours	Lectur e	Tutorial	Lab / workshop	Total hours
1	Intro. to Cyber Security	1	1	0	0	1
2	IT Essentials	3	2	0	3	5
3	Technical English 1	3	2	2	0	4
4	Mathematics 1	3	2	2	0	4
5	physics	3	2	2	0	4
6	Programming Essentials in python	3	2	0	3	5
	Total for 1st Semester	16	11	6	6	23

2 nd Semester						
No.	course	Credit hours	Lectur e	Tutorial	Lab / workshop	Total hours
1	Programming Essentials in C	3	2	0	3	5
2	Cyber Security Essentials	2	2	0	0	2
3	Intro to IoT& Connecting Things	3	2	0	3	5
4	MS office	2	1	0	4	5
5	Technical English II	3	2	2	0	4
6	Mathematics II	3	2	2	0	4
	Total for 2ndSemester	16	11	4	10	25

MS

Second Year

1st Semester						
No.	course	Credit hours	Lectur e	Tutorial	Lab / workshop	Total hours
1	Linux Essentials	3	2	0	3	5
2	Programming Essentials in C++	3	2	0	3	5
3	Web Programming I	3	1	0	6	7
4	Introduction to DB	2	2	0	0	2
5	Digital Engineering	3	2	0	3	5
6	Operating System	2	2	0	0	2
Total for 1st Semester		16	11	0	15	26
2nd Semester						
No.	course	Credit hours	Lectur e	Tutorial	Lab / workshop	Total hours
1	Java Programming I	3	1	0	6	7
2	Web Programming II	3	1	0	6	7
3	CCNA R&S I	3	2	0	3	5
4	Data Structure	3	2	0	3	5
5	Database Programming	2	1	0	4	5
6	Capstone Design	2	0	0	6	6
Total for 2ndSemester		16	7	0	28	35

Third Year

S/W development Track

1 st Semester						
No.	course	Credit hours	Lectur e	Tutorial	Lab / workshop	Total hours
1	Advanced Programming in C	3	2	0	3	5
2	Data Communication	2	2	0	0	2
3	Java Programming II	3	1	0	6	7
4	Computer Architecture	2	2	0	0	2
5	Microprocessor	3	2	0	3	5
6	Computer Graphics	3	2	0	3	5
	Total for 1 st Semester	16	11	0	15	26

2 nd Semester						
No.	course	Credit hours	Lectur e	Tutorial	Lab / workshop	Total hours
1	Advanced Programming in C++	3	2	0	3	5
2	Mobile Programming I	3	1	0	6	7
3	Embedded System	3	2	0	3	5
4	Network Programming	3	2	0	4	6
5	Algorithm	2	2	0	0	2
6	S/W Engineering	2	2	0	0	2
	Total for 2 nd Semester	16	11	0	16	27

Network Track

1 st Semester						
No.	course	Credit hours	Lectur e	Tutorial	Lab / workshop	Total hours
1	CCNA R&S II	3	2	0	3	5

2	Java Programming II	3	1	0	6	7
3	Data Communication	2	2	0	0	2
4	Network Administration	3	2	0	4	6
5	Microprocessor	3	2	0	4	6
6	Computer Architecture	2	2	0	0	2
	Total for 1st Semester	16	11	0	17	28

2nd Semester

No.	course	Credit hours	Lecture	Tutorial	Lab / workshop	Total hours
1	CCNA R&S III	3	2	0	3	5
2	Network Programming	3	2	0	4	6
3	CCNA Security	3	2	0	3	5
4	Embedded System	3	2	0	4	6
5	Distributed System	2	2	0	0	2
6	S/W Engineering	2	2	0	0	2
	Total for 2ndSemester	16	12	0	14	26

Fourth Year

S/W development Track

1st Semester						
No.	course	Credit hours	Lecture	Tutorial	Lab / workshop	Total hours
1	CCNA R&S II	3	2	0	3	5
2	Mobile Programming II	3	1	0	6	7
3	IoT Architecture & Protocols/IoT Programming	3	2	0	3	5
4	Artificial Intelligence	2	2	0	0	2

5	Windows Programming I	3	1	0	6	7
6	Signal Processing	2	2	0	0	2
	Total for 1st Semester	16	10	0	18	28

2nd Semester

No.	course	Credit hours	Lecture	Tutorial	Lab / workshop	Total hours
1	Robotics	3	2	0	3	5
2	Windows Programming II	3	1	0	6	7
3	Big Data & Analytics	2	1	0	3	4
4	IoT Security	3	2	0	3	5
5	Machine Learning	2	2	0	0	2
6	Entrepreneurship	1	1	0	0	1
7	Graduation Project	2	0	0	0	6
	Total for 2ndSemester	16	9	0	15	30

Network Track

1st Semester						
No.	course	Credit hours	Lecture	Tutorial	Lab / workshop	Total hours
1	CCNA R&S IV	3	2	0	3	5
2	IoT Architecture & Protocols/IoT Programming	3	2	0	3	5
3	Artificial Intelligence	2	2	0	0	2
4	CCNA Cybersecurity Operations	3	2	0	3	5
5	Server Administration	3	2	0	4	6
6	Encryption Algorithm	2	2	0	0	2
	Total for 1st Semester	16	12	0	13	25

2 nd Semester						
No.	course	Credit hours	Lecture	Tutorial	Lab / workshop	Total hours
1	CCNP Route	3	2	0	3	5
2	CCNP Switch	3	2	0	3	5
3	Big Data & Analytics	2	1	0	3	4
4	IoT Security	3	2	0	3	5
5	Machine Learning	2	2	0	0	2
6	Entrepreneurship	1	1	0	0	1
7	Graduation Project	2	0	0	0	6
	Total for 2 nd Semester	16	10	0	12	28