

Information Technology Programs

Study Plan

Curriculum Summary

The summary of a four-year program leading to a B.Sc. in Information Technology is presented. The number of credit hours is 147 distributed among the four-year program. A number of supporting hours is needed for exercises and laboratory sessions.

(First Year)

First semester					
Course code	Course Name	Credit Hours	Lecture Hours	Exercise/Lab Hours	Prerequisite
GEN102	English Language	3	3		
GEN103	Mathematics (1)	3	2	2	
GEN108	Physics (1)	3	2	2	
ITF101	Introduction to Information Technology	3	2	2	
SWE101	Programming Techniques (1)	3	2	2	
CAS101	Introduction to Computers	3	2	2	
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Second semester					
Course code	Course Name	Credit Hours	Lecture Hours	Exercise/Lab Hours	Prerequisite
GEN101	Arabic Language	2	2		2
GEN104	Mathematics (2)	3	2	2	Mathematics (1) (GEN103).
GEN105	Probability and Statistics	3	2	2	Mathematics (1) (GEN103).
GEN109	Physics (2)	3	2	2	Physics (1) (GEN108).
GEN112	Creative and Scientific Thinking	2	2		
NWE101	Introduction to Web Technology	3	2	2	Introduction to IT (ITF101)
SWE102	Programming Techniques (2)	3	2	2	Programming Techniques (1) (SWE101)
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(Second year)

First semester					
Course code	Course Name	Credit Hours	Lecture Hours	Exercise/Lab Hours	Prerequisite
GEN213	Report writing and Presentation	3	2	2	Arabic Language (GEN101), English Language (GEN102),
SWE203	Programming. Techniques (3)	3	2	2	SWE102
GEN206	Discrete Mathematics	3	2	2	Mathematics (1) (GEN103)
GEN210	Electronics	3	2	2	Physics (2) (GEN109)
CAS205	Automata Models	3	2	2	Introduction to Computer Systems (CAS101).
GEN211	Systems and Operations Research	4	3	2	Probability and Statistics (GEN105)
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Second semester					
Course code	Course Name	Credit Hours	Lecture Hours	Exercise/Lab Hours	Prerequisite
SWE206	Algorithms and Data Structures	3	2	2	Programming Techniques (3) (SWE203)
GEN207	Numerical Methods	3	2	2	Mathematics (2) (GEN104)
SWE204	Software Engineering (1)	3	2	2	Programming Techniques (3) (SWE203)
CAS202	Computer Organization (1)	3	2	2	Automata Models (CAS205)
CAS204	Operating Systems	3	2	2	Automata Models (CAS205)
GEN214	Information Economy	2	2		Introduction to IT (ITF101)
GEN216	Human Rights and Ethics	2	2		
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(Third year)

First semester					
Course code	Course Name	Credit Hours	Lecture Hours	Exercise/Lab Hours	Prerequisite
ITF302	Database Systems	3	2	2	Algorithms and Data Structures (SWE206)
CAS303	Computer Organization (2)	3	2	2	Computer Organization (1) (CAS202)
NWE302	Computer Networks (1)	3	2	2	Computer Organization (1) (CAS202)- Operating Systems (CAS204)
SWE305	Software Engineering (2)	3	2	2	Software Engineering (1) (SWE204)
HCI302	Computer Graphics	3	2	2	Algorithms and Data Structures (SWE206)
	Elective (1)	3	2	2	
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Second semester					
Course code	Course Name	Credit Hours	Lecture Hours	Exercise/Lab Hours	Prerequisite
ITF303	Intelligent Databases	3	2	2	Database Systems (ITF302)
ITF306	Language Engineering	3	2	2	Automata Models (CAS205)
NWE303	Computer Networks (2)	3	2	2	Computer Networks (1) (NWE302)
NWE304	Web Engineering (1)	3	2	2	Computer Networks (1) (NWE302)
GEN315	Information Ethics	3	2	2	Introduction to IT (ITF101) - Introduction to Computer Systems (CAS101)– Introduction to Web Technology (NWE101)
	Elective (2)	3	2	2	
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(Fourth year)

First semester					
Course code	Course Name	Credit Hours	Lecture Hours	Exercise/Lab Hours	Prerequisite
HCI401	Human Computer Interaction	2	2		Computer Graphics (HCI302)
CAS406	Modeling and Simulation	3	2	2	Systems and Operation Research (GEN211)- Computer Organization (2) (CAS303)
HCI403	Multimedia and Virtual Reality	4	3	2	Computer Graphics (HCI302)
NWE405	Web Engineering (2)	3	2	2	Web Engineering (1) (NWE304)
PRO401	Project (1)	3	1	4	
	Elective (3)	3	2	2	
		18			

Second semester					
Course code	Course Name	Credit Hours	Lecture Hours	Exercise/Lab Hours	Prerequisite
NWE407	Mobile and Sensor Network	3	2	2	Computer Networks (2) (NWE303)
ITF404	Information Assurance & Security	3	2	2	Web Engineering (2) (NWE405) – Computer Networks (2) (NWE303)
ITF405	Integrated Information Systems	3	2	2	Intelligent Databases (ITF303)
NWE406	Web Engineering (3)	3	2	2	Web Engineering (2) (NWE405)
PRO402	Project (2)	3	1	4	
	Elective (4)	3	2	2	
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Software Engineering Masters Program

المقررات الدراسية و توصيف المقررات

يقوم الطالب باجتياز (36) ساعة معتمدة بنجاح بيانها كآتي:

الساعات المعتمدة	البيان
18	مقررات دراسية اجبارية
6	مقررات دراسية اختيارية
12	رسالة الماجستير
36	المجموع

النظام الكودي للمقررات

تكون المقررات بوضع الرمز الكودي للبرنامج وهو "هـب" باللغة العربية و "SE" باللغة الانجليزية أولاً ويلي الرمز الكودي الرقم "600" الدال على أن مستوى المقرر لدرجة الماجستير. ثم يليها خانة رقم المقرر.

أ - المقررات الإجبارية:

عدد الساعات المعتمدة	اسم المقرر	كود المقرر	
3	Research Methods in Software Engineering	SE601	هـب 601
3	Software Requirements Engineering	SE602	هـب 602
3	Software Management	SE603	هـب 603
3	Software Testing & Quality Assurance	SE604	هـب 604
3	Software Design and Architecture	SE605	هـب 605
3	Software Construction	SE606	هـب 606

ب المقررات الاختيارية:

عدد الساعات المعتمدة	اسم المقرر	كود المقرر	
3	Secure Software Development	SE611	هـب 611

3	Software Maintenance and Evolution	SE612	هـب 612
3	Human Computer Interaction	SE613	هـب 613
3	Global Software Engineering Team	SE614	هـب 614
3	Software Engineering in Mobile Computing	SE615	هـب 615
3	Software Engineering for Distributed Systems	SE616	هـب 616
3	Advanced Topics in Software Engineering	SE617	هـب 617
3	Selected Topics in Software Engineering	SE618	هـب 618