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Department: Information Systems	Program: Computer Information Systems	Official Stamp
The study plan was approved by the decision of the Deans' Council no. ..... on		

About the Program
The Department of Information Systems (IS) formerly "The Department of Computer Information Systems" was established in the academic year 2002/2003 as part of the Faculty of Information Technology and Computer Sciences. The department offers a bachelor's degree in CIS which provides promising employment opportunities in business, industry and the area of Information Technology. In 2019, the department has reviewed the curriculum for the bachelor's degree and a new comprehensive and emergent curriculum has been approved. IS department offers a mater's program in Computer Information Systems, which provides advanced theoretical and practical skills in this discipline.

Vision and Mission	
Vision	**To achieve a leading and distinctive position among Information Systems (IS) departments of other local and regional universities.**
Mission	**Providing local and regional markets with competent and qualified graduates equipped and endorsed with the needed knowledge and necessary technical and soft skills in order to enable them to overcome variety of information systems-related challenges by empowering students with exceptional practical and theoretical courses. The IS department also works on providing positive, informative, and pioneer learning environment which helps to hone the character of our graduates and to contribute in shaping individuals' personalities to build information society. Yarmouk University's IS department envisions an abundance of world-class research that contributes in enhancing information systems research community and provides continuous support in building skillset for academic staff and students.**

Program Objectives	
1	**Obtain a successful professional career in industry, academia, or any related field where they meet or exceed expectations**
2	**Utilize and apply the knowledge acquired by the program such as the problem-solving skills, critical thinking skills, communications skills and technical computer skills including but not limited to web domains, cloud computing and data sciences to make informed, responsible, and risk-aware decisions in the workplace.**
3	**Employ professional and educational skills taught in the CIS program to make a positive impact on society.**

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Program Learning Outcomes PLOs	
PLO1	**Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.**
PLO2	**Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the Computer Information Systems.**
PLO3	**Communicate effectively in a variety of professional contexts.**
PLO4	**Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.**
PLO5	**Function effectively as a member or leader of a team engaged in activities appropriate to the Computer Information Systems.**
PLO6	**Support the delivery, use, and management of information systems within an information systems environment.**
PLO7	**Design, implement, and use of data management, analysis and retrieval solutions.**

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Credit hours to obtain a degree in Information Technology and Computer Sciences in a specialization of Computer Information Systems			
	Credit Hours		
	Compulsory	Elective	Total
University Requirements	15	12	**27**
Faculty Requirements	22	0	**22**
Department Requirements	67	18	**85**
Total	**104**	**30**	**134**

First: University Compulsory Courses (15) Credit Hours						
Course Code	Course No.	Course Name	Number of Credit Hours			Pre-requisite
			Theoretical	Practical	Total	
HUM	**117**	Pioneering and Creativity	1	0	1	-
HUM	**118**	Leadership and Society	1	0	1	-
HUM	**119**	Life Skills	1	0	1	-
HUM	**120**	Communication Skills (English Language)	3	0	3	-
HUM	**121**	Communication Skills (Arabic Language)	3	0	3	-
PS	**102**	Civil Education	3	0	3	-
MILT	**100A**	Military sciences and citizenship	3	0	3	-
EL	**099**	English Language Skills- Remedial	Remedial	0	0	-
AL	**099**	Arabic Language - Remedial	Remedial	0	0	-
COMP	**099**	Computer Skills - Remedial	Remedial	0	0	-

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Second: University Elective Courses (12) Credit Hours						
Course Code	**Course No.**	**Course Name**	**Number of Credit Hours**			**Pre-requisite**
			Theoretical	**Practical**	**Total**	
HUM	101	Basic of Mass Communication	3	0	3	-
HUM	102	Citizenship and Allegiance	3	0	3	-
HUM	103	Islamic: Intellect & Civilization	3	0	3	-
HUM	104	Arts and Behaviours	3	0	3	-
HUM	105	Jordan Contribution to Human Civilization	3	0	3	-
HUM	106	Introduction to Human Cultural Studies	3	0	3	-
HUM	107	Human Rights	3	0	3	-
HUM	108	Thinking Skills	3	0	3	-
HUM	109	Islamic Systems	3	0	3	-
HUM	110	The Culture of Tourism and Hospitality	3	0	3	-
HUM	111	History of Jerusalem	3	0	3	-
HUM	112	Geography of Jordan	3	0	3	-
HUM	113	Islamic Educational Thinking	3	0	3	-
HUM	114	Good Governance and Integrity	3	0	3	-
HUM	115	Legal Education	3	0	3	-

HUM	116	Ancient writings of Jordan	3	0	3	-
HUM	122	Economy and Society	3	0	3	-
HUM	123	Performing Arts	3	0	3	-
SCI	101	Environment & Public Health	3	0	3	-
SCI	103	Physical Education for All	3	0	3	-
SCI	104	Effective Communication Skills	3	0	3	-
SCI	105	Renewed Energy	3	0	3	-
SCI	106	Management and Society Development	3	0	3	-
SCI	107	Scientific Research	3	0	3	-
SCI	110	Development and environment	3	0	3	-
SCI	111	Principle of Epidemiology and Community Immunity	3	0	3	-

Third: Faculty Compulsory Courses (22) Credit Hours						
Course Code	**Course No.**	**Course Name**	**Number of Credit Hours**			**Pre-requisite**
			Theoretical	**Practical**	**Total**	
CS	111	Programming in a selected Language	3	0	3	-
CS	111L	Programming in a selected	0	3	1	CS 111

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		Language (Lab)				
MATH	101	Calculus I	3	0	3	-
CIS	101	Introduction to Information System	3	0	3	-
CIS	260	Database Systems	3	0	3	CS 210 and CIS 101
STAT	111	Introduction to Probability (1)	3	0	3	-
BIT	221	Legal Issues in Information Technology	3	0	3	CYS 230
BIT	381	Web Application Development (1)	3	0	3	CIS 260

Fourth: Department Compulsory Courses (67) Credit Hours

Course Code	Course No.	Course Name	Number of Credit Hours			Pre-requisite
			Theoretical	Practical	Total	
CIS	214	Visual Programming	3	0	3	CIS 101 & CS 210
CIS	240	Introduction to Software Engineering	3	0	3	CIS 101 & CS 210
CIS	260L	Database Systems Lab	0	3	1	CIS 260
CIS	265	Database Management System	3	0	3	CIS 260
CIS	340	Object Oriented Analysis and Design	3	0	3	CIS 240
CIS	340L	Object Oriented	0	3	1	CIS 340

		Analysis and Design Lab				
CIS	342	System Analysis and Design	3	0	3	CIS 240 & CIS 260
CIS	360	Developing Database Applications	3	0	3	CIS 260
CIS	367	Data Warehousing	3	0	3	CIS 260
CIS	382	Cloud Computing	3	0	3	CIS 260 & CS 332
CIS	440	Software Testing and Validation	3	0	3	CIS 340L
CIS	464	Information Retrieval Systems	3	0	3	CIS 260
CIS	467A	Data Mining	3	0	3	CIS 260
CIS	467L	Information retrieval and Mining Lab	0	3	1	CIS 467A or together
CIS	468	Big Data Management	3	0	3	CIS 467A & CIS360
CIS	499	Graduation Project	3	0	3	Complete 98 CHs
CS	142	Discrete Structures	3	0	3	MATH 101
CS	210	Object Oriented Programming	3	0	3	CS 111
CS	210L	Object Oriented Programming (Lab)	0	3	1	CS 210 & CIS 111L
CS	250	Data Structures	3	0	3	CS 210
CS	332	Data Communication and Networks	3	0	3	CYS 230

CS	351	Analysis and Design of Algorithms	3	0	3	CS 250 & CS 142
CYS	230	Cyber Security Principles	3	0	3	CS 111
CYS	334	Network security	3	0	3	CS 332
BIT	364	Systems and Projects Management	3	0	3	CIS 260

Fifth: Department Elective Courses (9) Credit Hours

Course Code	Course No.	Course Name	Number of Credit Hours			Pre-requisite
			Theoretical	Practical	Total	
CIS	227	Human Computer Interaction	3	0	3	CS 210L
CIS	241	Software Documentation	3	0	3	CIS 240
CIS	256	File Structures	3	0	3	CS 250
CIS	370	Intelligent Systems and Internet of Things	3	0	3	CS 210 & CS 332
CIS	380	Information System Applications	3	0	3	CS 360
CIS	441	Software Quality Assurance	3	0	3	CIS 440
CIS	472	Applied Data Mining	3	0	3	CIS 467A
CIS	480	Distributed Systems Applications	3	0	3	CS 332 & BIT 381
CIS	492	Special Topics	3	0	3	CIS 360

CIS	497	Training Certificate (*)	3	0	3	
CIS	498	Practical Training	3	3	3	Complete 98 CHs successfully

(*) Equivalent to an accredited international certificate in one of the fields of specialization approved by the department according to special foundations

Sixth: Department Elective Courses (6) Credit Hours– Faculty of IT

Course Code	Course No.	Course Name	Number of Credit Hours			Pre-requisite
			Theoretical	Practical	Total	
CS	281	Multimedia Systems	3	0	3	CIS 101 & CS 210
CS	376	Artificial Intelligence	3	0	3	CS 351
BIT	222	Entrepreneurship in IT	3	0	3	CIS 101
BIT	481	Web Application Development (2)	3	0	3	BIT 381

Seventh: Department Elective Courses (3) Credit Hours – Faculty of Science

Course Code	Course No.	Course Name	Number of Credit Hours			Pre-requisite
			Theoretical	Practical	Total	
MATH	241	Linear Algebra (1)	3	0	3	MATH 101
MATH	322	Numerical Analysis (1) (for IT Students)	3	0	3	CS 142
STAT	101	Introduction to Statistics (1)	3	0	3	---

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		Mapping of Program Learning Outcomes PLOs						
No.	**Course Code and number**	**PLO1**	**PLO2**	**PLO3**	**PLO4**	**PLO5**	**PLO6**	**PLO7**
1	**CIS 101**	☒	☐	☐	☒	☐	☒	☒
2	**CIS 214**	☐	☒	☐	☐	☐	☐	☐
3	**CIS 240**	☒	☒	☐	☒	☐	☐	☐
4	**CIS 260**	☐	☒	☐	☐	☐	☒	☒
5	**CIS 260L**	☐	☒	☐	☐	☐	☐	☒
6	**CIS 265**	☒	☐	☐	☒	☐	☒	☒
7	**CIS 340**	☒	☒	☐	☐	☐	☐	☐
8	**CIS 340L**	☒	☒	☐	☐	☐	☐	☐
9	**CIS 342**	☒	☒	☐	☐	☐	☐	☐
10	**CIS 360**	☐	☒	☐	☐	☒	☒	☒
11	**CIS 367**	☐	☐	☐	☐	☐	☐	☒
12	**CIS 464**	☐	☐	☐	☐	☐	☒	☒
13	**CIS 467A**	☐	☐	☐	☐	☐	☐	☒
14	**CIS 467L**	☒	☒	☐	☐	☐	☐	☒
15	**CIS 382**	☒	☐	☐	☐	☐	☐	☐
16	**CIS 227**	☐	☒	☐	☒	☐	☒	☐
17	**CIS 241**	☒	☒	☐	☐	☐	☐	☐
18	**CIS 256**	☒	☒	☐	☐	☐	☐	☒
19	**CIS 370**	☒	☒	☐	☒	☒	☒	☒
20	**CIS 380**	☒	☐	☒	☐	☒	☒	☒
21	**CIS 441**	☒	☐	☐	☐	☐	☒	☒
22	**CIS 472**	☒	☐	☐	☐	☐	☐	☒
23	**CIS 480**	☒	☒	☐	☒	☒	☒	☐
25	**CIS 498**	☐	☒	☒	☒	☒	☒	☒
26	**CIS499**	☒	☒	☒	☒	☒	☒	☒

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