First Semester (IT Core)					Second Semester (IT Core)				
	Course # Course Title Pre-Req. Cr			Cr	Course #	Course Title	Pre-Req.	Cr	
	IT101	IT Foundations		3	IT112	Programming II	IT111	4	
	IT111	Programming I		4	IT121	Digital and Logic Design	IT101	3	
Ι	GE111	English I		3	GS114	Math II	GS113	4	
	GS113	Math I		3	GS141	General Physics I + Lab I		3	
	GS221	Probability and Statistics		3	GE112	English II	GE111	3	
		-			GE101	Arabic I		3	
		Semester Credit Hours		16		Semester Credit Hours	s	20	
I	!	Third Semester (Specialization)				Fourth Semester (Specializatio	on)	<u>.</u>	
	Course #	Course Title	Pre-Req.	Cr	Course #	Course Title	Pre-Req.	Cr	
	IT212	Data Structures and Algorithms	IT112	3	IT222	Computer Architecture	IT121	3	
	IT201	Discrete Math and Structures	GS114, IT111	3	IT271	Network Fundamentals	IT121	3	
п	GE311	Technical Writing	GE112	3	GE331	Political Culture	>= 36 Cr. Hrs	3	
	GS213	Math III	GS114	3	CN281	Internet Programming	IT112	3	
	IS201	Foundations of Information Systems	IT112	3	IS271	Financial Accounting	GS113	3	
	SE201	Foundations of Software Engineering	IT112	3					
		Semester Credit Hours		18	Semester Credit Hours				
		Fifth Semester (Specialization)	_		Sixth Semester (Specialization)				
	Course #	Course Title	Pre-Req.	Cr	Course #	Course Title	Pre-Req.	C	
				<u> </u>	Course #	Course The	Pre-keq.	Cr	
	IT341	Database Systems	IT212	3	IT342	Security Principles and Practices	ГГе-Кец. IT271	Cr 3	
	IT341 IT322		-				-		
ш		Database Systems	IT212	3	IT342	Security Principles and Practices	IT271 IT101, >=45 Cr.	3	
ш	IT322	Database Systems Operating Systems	IT212 IT212	3	IT342 IT301	Security Principles and Practices Computing Ethics & Society	IT271 IT101, >=45 Cr. Hrs. <i>IS361</i> ,	3	
ш	IT322 <i>IS321</i>	Database Systems Operating Systems IS Theory and Practice	IT212 IT212 <i>IS201</i>	3 3 3	IT342 IT301 <i>IS362</i>	Security Principles and Practices Computing Ethics & Society Information System Development	IT271 IT101, >=45 Cr. Hrs. <i>IS361,</i> <i>IT341</i>	3 3 3	
ш	IT322 <i>IS321</i> <i>IS361</i>	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design	IT212 IT212 <i>IS201</i> <i>IS201</i> <i>SE201</i>	3 3 3 3	IT342 IT301 IS362 IS351	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior	IT271 IT101, >=45 Cr. Hrs. <i>IS361,</i> <i>IT341</i> <i>IS201</i> 75 Cr. Hrs	3 3 3 3	
ш	IT322 <i>IS321</i> <i>IS361</i>	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design Information System Engineering Semester Credit Hours	IT212 IT212 <i>IS201</i> <i>IS201</i> <i>SE201</i>	3 3 3 3 3 3	IT342 IT301 IS362 IS351	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior Dept. Elective I Semester Credit Hours	IT271 IT101, >=45 Cr. Hrs. <i>IS361,</i> <i>IT341</i> <i>IS201</i> 75 Cr. Hrs s	3 3 3 3 3	
III	IT322 IS321 IS361 IS322	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design Information System Engineering Semester Credit Hours Seventh Semester (Specialization)	IT212 IT212 IS201 IS201 SE201	3 3 3 3 3 15	IT342 IT301 <i>IS362</i> <i>IS351</i> ISxxx	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior Dept. Elective I Semester Credit Hours Eighth Semester (Specialization	IT271 IT101, >=45 Cr. Hrs. <i>IS361,</i> <i>IT341</i> <i>IS201</i> 75 Cr. Hrs s	3 3 3 3 3 15	
III	IT322 <i>IS321</i> <i>IS361</i>	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design Information System Engineering Semester Credit Hours	IT212 IT212 <i>IS201</i> <i>IS201</i> <i>SE201</i>	3 3 3 3 3 3	IT342 IT301 IS362 IS351	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior Dept. Elective I Semester Credit Hours	IT271 IT101, >=45 Cr. Hrs. <i>IS361,</i> <i>IT341</i> <i>IS201</i> 75 Cr. Hrs s	3 3 3 3 3 3	
ш	IT322 IS321 IS361 IS322 Course #	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design Information System Engineering Seventh Semester Credit Hours Course Title	IT212 IT212 <i>IS201</i> <i>IS201</i> <i>SE201</i> Pre-Req.	3 3 3 3 15 Cr	IT342 IT301 <i>IS362</i> <i>IS351</i> ISxxx Course #	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior Dept. Elective I Semester Credit Hours Eighth Semester (Specialization Course Title	IT271 IT101, >=45 Cr. Hrs. <i>IS361,</i> <i>IT341</i> <i>IS201</i> 75 Cr. Hrs s on) Pre-Req. IS495, 100	3 3 3 3 3 15 Cr	
ш	IT322 <i>IS321</i> <i>IS361</i> <i>IS322</i> Course # IT492	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design Information System Engineering Seventh Semester Credit Hours Course Title Internship	IT212 IT212 <i>IS201</i> <i>IS201</i> <i>SE201</i> Pre-Req. 90 Cr. Hrs 93 Cr. Hrs. <i>SE201, 93</i> <i>Cr. Hrs</i>	3 3 3 3 3 15 Cr 3 3	IT342 IT301 <i>IS362</i> <i>IS351</i> ISxxx Course # IT499	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior Dept. Elective I Semester Credit Hours Eighth Semester (Specialization Course Title Graduation Project	IT271 IT101, >=45 Cr. Hrs. IS361, IT341 IS201 75 Cr. Hrs s m) Pre-Req. IS495, 100 Cr. Hrs IS321,	3 3 3 3 3 15 Cr 4	
	IT322 <i>IS321</i> <i>IS361</i> <i>IS322</i> Course # IT492 IS495 <i>SE492</i> <i>CS451</i>	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design Information System Engineering Seventh Semester Credit Hours Seventh Semester (Specialization) Course Title Internship Introduction to Graduation Project Software Project Management Intelligent Systems	IT212 IT212 <i>IS201</i> <i>IS201</i> <i>SE201</i> Pre-Req. 90 Cr. Hrs 93 Cr. Hrs. <i>SE201, 93</i> <i>Cr. Hrs</i> <i>IT212, IT201,</i> 93 Cr. Hrs	3 3 3 3 3 3 15 Cr 3 3 3	IT342 IT301 <i>IS362</i> <i>IS351</i> ISxxx Course # IT499 IS475 IS472 IS472 ISxxx	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior Dept. Elective I Semester Credit Hours Eighth Semester (Specialization Course Title Graduation Project E-Commerce and E-Marketing Enterprise Resource Planning Dept. Elective III	IT271 IT101, >=45 Cr. Hrs. <i>IS361</i> , <i>IT341</i> <i>IS201</i> 75 Cr. Hrs s pre-Req. IS495, 100 <u>Cr. Hrs</u> IS321, CN281 IS321 	3 3 3 3 3 15 Cr 4 3 3 3	
	IT322 IS321 IS361 IS322 Course # IT492 IS495 SE492 CS451 SE321	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design Information System Engineering Sewester Credit Hours Seventh Semester (Specialization) Course Title Internship Introduction to Graduation Project Software Project Management Intelligent Systems Software Design	IT212 IT212 <i>IS201</i> <i>IS201</i> <i>SE201</i> Pre-Req. 90 Cr. Hrs 93 Cr. Hrs. <i>SE201, 93</i> <i>Cr. Hrs</i> <i>IT212, IT201,</i>	3 3 3 3 3 3 3 Cr 3 3 3 3	IT342 IT301 <i>IS362</i> <i>IS351</i> ISxxx Course # IT499 IS475 IS472	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior Dept. Elective I Semester Credit Hours Eighth Semester (Specialization Course Title Graduation Project E-Commerce and E-Marketing Enterprise Resource Planning	IT271 IT101, >=45 Cr. Hrs. <i>IS361,</i> <i>IT341</i> <i>IS201</i> 75 Cr. Hrs s m) Pre-Req. IS495, 100 Cr. Hrs IS321, CN281 IS321	3 3 3 3 3 15 Cr 4 3 3	
	IT322 <i>IS321</i> <i>IS361</i> <i>IS322</i> Course # IT492 IS495 <i>SE492</i> <i>CS451</i>	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design Information System Engineering Sewester Credit Hours Seventh Semester (Specialization) Course Title Internship Introduction to Graduation Project Software Project Management Intelligent Systems Software Design Dept. Elective II	IT212 IT212 IS201 IS201 SE201 SE201 Pre-Req. 90 Cr. Hrs 93 Cr. Hrs. SE201, 93 Cr. Hrs IT212, IT201, 93 Cr. Hrs IS361 	3 3 3 3 3 3 15 Cr 3 3 3 3 3 3	IT342 IT301 <i>IS362</i> <i>IS351</i> ISxxx Course # IT499 IS475 IS472 IS472 ISxxx	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior Dept. Elective I Semester Credit Hours Eighth Semester (Specialization Course Title Graduation Project E-Commerce and E-Marketing Enterprise Resource Planning Dept. Elective III	IT271 IT101, >=45 Cr. Hrs. <i>IS361</i> , <i>IT341</i> <i>IS201</i> 75 Cr. Hrs s pre-Req. IS495, 100 <u>Cr. Hrs</u> IS321, CN281 IS321 	3 3 3 3 3 3 15 Cr 4 3 3 3	
	IT322 IS321 IS361 IS322 Course # IT492 IS495 SE492 CS451 SE321	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design Information System Engineering Seventh Semester Credit Hours Seventh Semester (Specialization) Course Title Internship Introduction to Graduation Project Software Project Management Intelligent Systems Software Design Dept. Elective II Breadth Elective I	IT212 IT212 IS201 IS201 SE201 SE201 Pre-Req. 90 Cr. Hrs 93 Cr. Hrs IS201, 93 Cr. Hrs IT212, IT201, 93 Cr. Hrs IS361 93 Cr. Hrs	3 3 3 3 3 3 3 3 3 3 3 3 3	IT342 IT301 <i>IS362</i> <i>IS351</i> ISxxx Course # IT499 IS475 IS472 IS472 ISxxx	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior Dept. Elective I Semester Credit Hours Eighth Semester (Specializatio Course Title Graduation Project E-Commerce and E-Marketing Enterprise Resource Planning Dept. Elective III Breadth Elective II	IT271 IT101, >=45 Cr. Hrs. <i>IS361,</i> <i>IT341</i> <i>IS201</i> <i>75 Cr. Hrs</i> s m) Pre-Req. IS495, 100 <u>Cr. Hrs</u> IS321, CN281 IS321 	3 3 3 3 3 3 15 Cr 4 3 3 3 3 3	
	IT322 <i>IS321</i> <i>IS361</i> <i>IS322</i> Course # IT492 IS495 <i>SE492</i> <i>CS451</i> <i>SE321</i> ISxxx	Database Systems Operating Systems IS Theory and Practice Systems Analysis and Design Information System Engineering Sewester Credit Hours Seventh Semester (Specialization) Course Title Internship Introduction to Graduation Project Software Project Management Intelligent Systems Software Design Dept. Elective II Breadth Elective I Semester Credit Hours	IT212 IT212 IS201 IS201 SE201 SE201 Pre-Req. 90 Cr. Hrs 93 Cr. Hrs IS201, 93 Cr. Hrs IT212, IT201, 93 Cr. Hrs IS361 93 Cr. Hrs	3 3 3 3 3 3 15 Cr 3 3 3 3 3 3 18	IT342 IT301 <i>IS362</i> <i>IS351</i> ISxxx Course # IT499 IS475 IS472 IS472 ISxxx 	Security Principles and Practices Computing Ethics & Society Information System Development Organizational Behavior Dept. Elective I Semester Credit Hours Eighth Semester (Specialization Course Title Graduation Project E-Commerce and E-Marketing Enterprise Resource Planning Dept. Elective III Breadth Elective II	IT271 IT101, >=45 Cr. Hrs. <i>IS361,</i> <i>IT341</i> <i>IS201</i> <i>75 Cr. Hrs</i> s m) Pre-Req. IS495, 100 <u>Cr. Hrs</u> IS321, CN281 IS321 	3 3 3 3 3 3 15 Cr 4 3 3 3	

• General Education courses (15 credits)

Course #	Course Title	Pre-Req.	Cr.
GE101	Arabic		3
GE111	English I		3
GE112	English II	GE111	3
GE331	Political Culture		3
GE311	Technical writing	GE112	3
	Total	·	15

• General Science courses (16 credits)

Course #	Course Title	Pre-Req.	Cr.
GS113	Math I		3
GS114	Math II	GS113	3
GS213	Math III	GS114	3
GS141	General Physics I + Lab I		4
GS221	Probability and Statistics		3
	Total		16

• IT Core courses (45 credits)

Course #	Course Title	Pre-Req.	Cr.
IT101	IT Foundations		3
IT111	Programming I		4
IT112	Programming II	IT111	4
IT121	Digital and Logic Design	IT101	3
IT201	Discrete Math and Structures	GS114, IT111	3
IT212	Data Structures and Algorithms	IT112	3
IT222	Computer Architecture	IT121	3
IT271	Network Fundamentals	IT121	3
IT301	Computing Ethics & Society	IT101, >=45 Cr. Hrs.	3
IT322	Operating Systems	IT212	3
IT341	Database Systems	IT212	3
IT342	Security Principles and Practices	IT271	3
IT492	Internship	90 Cr. Hrs	3
IT499	IT Capstone Project	IS495, <mark>100 Cr. Hrs</mark>	4
	Total		45

Course #	Course Title	Pre-Req.	Cr.
IS201	Foundations of Information Systems	IT112	3
SE201	Foundations of Software Engineering	IT112	3
IS271	Financial Accounting	GS113	3
CN281	Internet Programming	IT112	3
IS321	IS Theory and Practice	IS201	3
SE321	Software Design	IS361	3
SE322	Human Computer Interaction	SE201	3
IS351	Organizational Behavior	IS201	3
IS361	Systems Analysis and Design	IS201	3
IS362	Information System Development	IS361, IT341	3
IS472	Enterprise Resource Planning	IS321	3
CS451	Intelligent Systems	IT212, IT201, 93 Cr.	3
IS475	E-Commerce and E-Marketing	IS321, CN281	3
SE492	Software Project Management	SE201, 93 Cr. Hrs.	3
IS495	Introduction to Graduation Project	93 Cr. Hrs.	
	Total		42

• Information Systems department core courses (36 credits)

• Information Systems department electives: students select 3 courses (9 credits)

Course #	Course Title	Pre-Req.	Cr.
IS302	Systems Simulation	IT112, GS221	3
IS374	Principles of Marketing	IS271	3
IS452	Optimization and Decision Making	IS351, GS221	3
IS491	Special Topics in Information Systems	90 Cr. Hr.	3
CS443	Data and Web Mining	CS451	3
CS471	Distributed Systems	IT322	3
SE461	Software Quality	SE321	3

Important Notes:

Department Electives

• To take *Dept. Electives* students must achieve a minimum of <u>75 Cr. Hrs.</u>

Breadth Electives

- Students must select 2 courses from other departments as *Breadth Electives*.
- To take *Breadth Electives* students must achieve at least <u>93 Cr. Hrs.</u>

INFORMATION SYSTEMS STUDENTS MUST COMPLETE A TOTAL OF 133 CREDITS.

Last revised: March 2019

1st Year (Total credits = 36)

#	Course Name	Pre-req.	Cr.	Sem.	Post-req.
IT101	IT Foundations		3	1	IT121
IT111	Programming I		4	1	IT112
IT112	Programming II	IT111	4	2	IT212, IT301, IS201, SE201
IT121	Digital and Logic Design	IT101	3	2	IT222, IT271
GE101	Arabic		3	1	
GE111	English I		3	1	GE112
GE112	English I	GE111	3	2	GE311
GS113	Math I		3	1	GS114, IS271
GS114	Math II	GS113	3	2	GS213, IT201
GS141	General Physics I + Lab I		4	2	
GS221	Probability and Statistics		3	3,4	Dept. Elect. (IS452, IS302)

2nd Year (Total credits = 33)

#	Course Name	Pre-req.	Cr.	Sem.	Post-req.
IT201	Discrete Math and Structures	GS114, IT111	3	3	CS451
IT212	Data Structures and Algorithms	IT112	3	3	IT322, IT341, CS451
IT222	Computer Architecture	IT121	3	3,4	
IT271	Network Fundamentals	IT121	3	3,4	IT271
GS213	Math III	GS114	3	3,4	
IS201	Foundations of IS	IT112	3	3	IS321, IS351, IS361
SE201	Foundations of Software Eng.	IT112	3	3	SE322, SE492
IS271	Financial Accounting	GS113	3	4	Dept. Elect. (IS374)
CN281	Internet Programming	IT112	3	4	IS475
GE311	Technical Writing	GE112	3	3,4	
GE331	Political Culture	>= 36 Cr. Hrs	3	3,4	

3rd Year (Total credits = 30)

#	Course Name	Pre-req.	Cr.	Sem.	Post-req.		
IT301	Computing Ethics & Society	IT101, >=45 Cr.	3	5,6			
		Hrs.					
IT322	Operating Systems	IT212	3	5	Dept. Elect. (CS471)		
IT341	Database Systems	IT212	3	5	IS362		
IT342	Security Principles & Practices	IT271	3	5,6			
IS321	IS Theory and Practice	IS201	3	5	IS472, IS475		
IS351	Organizational Behavior	IS201	3	5,6	Dept. Elect. (IS452)		
IS361	Systems Analysis and Design	IS201	3	5	IS362, SE321		
IS362	Information System Development	IS361, IT341	3	6			
SE322	Human Computer Interaction	SE201	3	5,6			
	Dept. Electives (1 course)						
IS302	Systems Simulation	IT112, GS221	3	6			
IS374	Principles of Marketing	IS271	3	6			

4rd Year (Total credits = 34)

#	Course Name	Pre-req.	Cr.	Sem.	Post-req.
IT492	Internship	90 Cr.	3	7	
IS495	Intro. to Graduation Project	93 Cr.		7	IT499
IT499	IT Capstone Project	IS495, <mark>108 Cr.</mark>	4	8	
IS472	Enterprise Resource Planning	IS321	3	7,8	
IS475	E-Commerce and E-Marketing	IS321, CN281	3	7,8	
CS451	Intelligent Systems	IT212, IT201,	3	7	Dept. Elect. (CS443)
		93 Cr.			
SE492	Software Project Management	SE201, 93 Cr.	3	7	
SE321	Software Design	IS361	3	6,7	Dept. Elect. (SE461)
	Dept	t. Electives (2 cour	ses)		
IS452	Optimization & Decision	IT351, GS221	3	7,8	
	Making				
IS491	Special Topics in IS	90 Cr.	3	7,8	
CS443	Data and Web Mining	CS451	3	7,8	
CS471	Distributed Systems	IT322	3	7,8	
SE461	Software Quality	SE321	3	7,8	
	Bread	th Electives (2 cou	rses)		