



## Information Systems Program

### Offered Courses

- **University Requirements**
  - **Mandatory University Courses**

Code	Course	Number of Hours / Week				Co-requirement
		Credit Hours	Lecture	Practical	Ex.	
HUM110	English language I	2	2	-	-	-
HUM113	Report Writing	2	2	-	-	-
STU130	Selected Uni. Topic (1)	2	2	-	-	-
STU140	Selected Uni. Topic (2)	2	2	-	-	-
STU150	Selected Uni. Topic (3)	2	2	-	-	-
Total		10				

- **Mandatory University Courses not added to the GPA**

Code	Course	Number of Hours / Week				Co-requirement
		Credit Hours	Lecture	Practical	Ex.	
HUM119	Human Rights and Combating Corruption	2	2	-	-	-

- **Selective University Courses**

Code	Course	Number of Hours / Week				Co-requirement
		Credit Hours	Lecture	Practical	Ex.	
HUM112	English language II	2	2	-	-	HUM110 English Language I
HUM118	Communication and Negotiation skills	2	2	-	-	-
HUM216	Professional Ethics and Legal Aspects	2	2	-	-	-
HUM114	Arab & Islamic Civilization	2	2	-	-	-
HUM115	Recent Egypt History	2	2	-	-	-
HUM116	Geography of Egypt	2	2	-	-	-
HUM117	Introduction to the History of Civilizations	2	2	-	-	-
HUM201	Music Appreciation	2	2	-	-	-



HUM202	Trends in Contemporary Arts	2	2	-	-	-
HUM203	Literary Appreciation	2	2	-	-	-
HUM204	Psychology	2	2	-	-	-
HUM215	First aid skills	2	2	-	-	-
HUM220	Introduction to Accounting	2	2	-	-	-
HUM222	Business Administration	2	2	-	-	-

- **Faculty Requirements**
  - **Mathematics and Basic Sciences**

Code	Course	Number of Hours / Week				Co-requirement
		Credit Hours	Lecture	Practical	Ex .	
BSC121	Physics I	3	2	1	1	-
BSC126	Physics II	3	2	1	1	BSC121. Physics I
BSC122	Calculus I	3	2	-	2	--
BSC124	Electronics	4	2	2	2	BSC121. Physics I
BSC125	Calculus II	3	2	-	2	BSC122. Calculus I
BSC221	Discrete Mathematics	3	2	-	2	--
BSC225	Linear Algebra	3	2	-	2	--
BSC123	Probability & Statistics	3	2	-	2	--
Total		25				

- **Basic Computing Courses**

Code	Course	Number of Hours / Week				Co-requirement
		Credit Hours	Lecture	Practical	Tut.	
CIS160	Introduction to Computer Sciences	3	2	2	-	-
CIS150	Structured Programming	3	2	2	-	CIS160. Introduction to Computer Sciences
CIS270	Data Structures	3	2	2	-	CIS150. Structured Programming
CIS230	Operations Research	3	2	2	-	-
CIS250	Object-Oriented Programming	3	2	2	-	CIS150. Structured Programming
CIS260	Logic Design	3	2	2	-	BSC121. Physics I



CIS280	Database Management Systems	3	2	2	-	CIS150. Structured Programming
CIS290	System Analysis & Design	3	2	-	2	CIS280. Database Management Systems
CIS240	Statistical Analysis	3	2	-	2	SC123. Probability & Statistics
CIS340	Analysis & Design of Algorithms	3	2	2	-	CIS150. Structured Programming
CIS243	Artificial Intelligence	3	2	2	-	CIS150. Structured Programming
CIS220	Computer Organization & Architecture	3	2	2	-	CIS260. Logic Design
CIS353	Operating Systems	3	2	2	-	CIS220. Computer Organization & Architecture
CIS380	Software Engineering	3	2	2	-	CIS150. Structured Programming
CIS365	Computer Networks	3	2	2	-	CIS160. Introduction to Computer Sciences
<b>Total</b>		<b>45</b>				

- **Program Requirements**
  - **Mandatory Courses**

Code	Course	Number of Hours/Week				Co-Requirement
		Credit Hours	Lecture	Practical	Tut.	
INF311	Data Mining	3	2	2	-	CIS280. Database Management Systems
INF312	Statistical Inference	3	2	2	-	BSC123. Probability and Statistics
INF321	Data Analytics	3	2	2	-	INF312. Statistical Inference



INF322	Digital Multimedia	3	2	2	-	CIS150. Structured Programming
INF323	Data Security	3	2	2	-	CIS365. Computer Networks
INF411	Data Science I	3	2	2	-	NF312 Statistical Inference
INF412	Cloud Computing	3	2	2	-	CIS365. Computer Networks
INF413	Geographic Information Systems	3	2	2	-	CIS280. Database Management Systems
INF421	Mobile Computing	3	2	2	-	CIS150. Structured Programming, CIS365. Computer networks
INF422	Social Media Analytics	3	2	2	-	INF312. Statistical Inference
INF423	Cyber Security	3	2	2	-	CIS365. Computer Networks
STI310	Selected Topic 1	3	2	2	-	
STI320	Selected Topic 2	3	2	2	-	
STI330	Selected Topic 3	3	2	-	-	
STI340	Selected Topic 4	3	2	-	-	
STI350	Selected Topic 5	3	2	-	-	
Total		48				

○ **Elective Courses**

Code	Course	Number of Hours /Week				Co-Requirement
		Credit Hours	Lecture	Practical	Tut.	
INF414	Graph Database	3	2	2	-	CIS280. Database Management Systems
INF415	Software Design Patterns	3	2	2	-	CIS380. Software Engineering
INF416	Human-Computer Interaction	3	2	2	-	--



INF424	Data Science II	3	2	2	-	INF411. Data Science I
INF425	Data Curation & Management	3	2	2	-	INF321. Data Analytics
INF426	Software Quality Assurance	3	2	2	-	CIS380. Software Engineering
INF427	Information Visualization	3	2	2	-	INF321. Data Analytics
INF428	Health Informatics	3	2	2	-	CIS150. Structured Programming
SCO432	Game Design and Implementation	3	2	2	-	SCO311. Computer Graphics
CSY330	High Performance Computing	3	2	2	-	CIS353. Operating Systems
CSC470	Internet of things (IoT)	3	2	2	-	CIS365. Computer Networks
SCO311	Computer Graphics	3	2	2	-	BSC225. Linear Algebra, CIS150. Structured Programming

- Graduation Project**

Code	Course	Number of Hours / Week				Co-requirement
		Credit Hours	Lecture	Practical	Tut.	
PRO400	Project	6	-	10	2	-