

Course Data					Prerequisite
	Course Name		Course Code	Credit Hours	Course Name
First Term	English I	M	GEN 101	2	
	Social issues and anti-corruption	M	GEN 103	2	
	Mathematics	M	BAS 101	3	
	Discrete Mathematics	M	BAS 102	3	
	Statistics and Probabilities	M	BAS 104	3	
	Introduction to Computers	M	COM 101	3	
	Fundamentals of Information Systems	M	COM 102	3	
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Second Term	English II(7) Dr. Sarah yahia, Dr. Amira{calling Dr. Sarah Naiem}	M	GEN 102	2	English I
	Logic Design(7) {Engineering} Dr. Roaa	M	COM 104	3	Discrete Mathematics
	Programming(6) Dr.Soha (4), Milad(2)	M	COM 103	3	Introduction to Computers
	Physics(7) Dr. Ayat	M	BAS 103	3	
	Professional Ethics (6) Dr. Osama(5 saturday) - Ahmed Hisham (1)	E	GEN 115	2	
	Creative Thinking(7) Dr. Helal(3) - Dr. Safaa(4)	E	GEN 113	2	
	Fundamentals of Management (6*3) Dr. Sarah shalash, Dr. Nehal	E	BAS 203	3	
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Third Term	Electronics	M	BAS 201	3	Physics
	Algorithms	M	COM 202	3	Programming
	Database System	M	COM 203	3	Fundamentals of Information Systems
	Computer Networks	M	COM 204	3	Introduction to Computers
	Operating Systems	M	COM 205	3	Programming
	Advanced Statistics and Probabilities	E	BAS 202	3	Statistics and Probabilities
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Fourth Term	Linear Algebra	E	BAS 204	3	Discrete Mathematics
	System Analysis and Design	M	COM 206	3	Fundamentals of Information Systems
	Data Structures	M	COM 207	3	Algorithms
	Internet Technology	E	COM 209	3	Computer Networks
	Artificial Intelligence	E	COM 212	3	Algorithms
	Advanced Programming	E	COM 210	3	Algorithms
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Fifth Term	Advanced Database	M	DSC 301	3	Database System
	Data management	M	DSC 302	3	Database System
	Database Security	M	DSC 303	3	Database System
	Machine Learning	M	DSC 309	3	Operating Systems
	Basic of AI programming skills	E	DSC 311	3	Artificial Intelligence
	Data analysis algorithms	M	DSC 307	3	Discrete Mathematics
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Sixth Term	Practical Data Mining	M	DSC 304	3	Advanced Database
	Introduction to Big Data	M	DSC 305	3	Advanced Database

Sixth -

R and Python programming language	M	DSC 306	3	Advanced programming
Neural Networks and Deep Learning	E	DSC 312	3	Machine Learning
Technology of Crypto currencies	E	DSC 313	3	Database Security
Data Visualization	M	DSC 308	3	Advanced Database

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Seventh -

Hadoop and Apache Spark essentials	M	DSC 401	3	Introduction to Big Data
Information Modelling	M	DSC 402	3	Data analysis algorithms
Knowledgbase Management Systems	M	DSC 404	3	Advanced Database
Graduation project 1	G	COM 400	3	System analysis and design
Reinforcement Learning	E	DSC 411	3	Neural Networks and Deep Learning
Data wrangling	E	DSC 412	3	Data analysis algorithms

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Eighth -

Big Data Analysis	M	DSC 403	3	Hadoop and Apache Spark essentials
Practical Data Science	M	DSC 405	3	Information Modelling
Graduation project 2	G	COM 498	3	Graduation project 1
Practical training - 2	G	COM 499		Level 3 - 55% of credit hours
Problem Solving & Decision-making Skills	M	GEN 317	2	

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