First Semester			
Course Title	Pre-Req.	Credit	
IT Foundations		3	
Programming I		4	
Mathematics I		3	
English I		3	
Arabic		2	
Semester Credit Hours		15	

Second Semester			
Course Title	Pre-Req.	Credit	
Programming II		4	
Mathematics II		3	
English II		3	
Int. to Computer Networking		3	
Probability and Statistics		3	
Semester Credit Hours		16	

Third Semester		
Course Title	Pre-Req.	Credit
Int. Artificial Intelligence	IT Foundations	3
Digital and logic design	IT Foundations	3
Communication Skills	20 Cr. Hrs	2
Programming III	Programming II	4
Linear Algebra	Mathematics II	3
Physics		3
Semester Credit Hours		18

Fourth Semester		
Course Title	Pre-Req.	Credit
Data Structures and Algorithms	Programming III	3
System Analysis & Design	Programming II	3
Mathematics and Statistics for Al	Probability and Statistics	3
Computer Architecture	Digital and logic design	3
Introduction to Data Science	Int. Artificial Intelligence	3
Critical Thinking		2
Semester Credit Hours		17

Fifth Semester		
Course Title	Pre-Req.	Credit
Int. to Database Systems	Data Structures and Algorithms	3
Legal & Ethical Issues I	IT Foundations	1
Technical Writing	English II	3
Digital Signal Processing Systems	Physics	3
Operating System	Computer Architecture	3
Digital Image Processing	Linear Algebra	3
Machine Learning	Int. Artificial Intelligence	3
Semester Credit Hours		19

Sixth Semester			
Course Title	Pre-Req.	Credit	
Legal & Ethical Issues II	Legal & Ethical Issues I	1	
Research Methods	75 Cr. Hrs	2	
Security Practice and Principles	Int. to Computer Networking	3	
Data Engineering and Analysis	Introduction to Data Science + Mathematics and Statistics for AI	З	
Deep Learning	Machine Learning	3	
Introduction to Embedded Systems	Operating System	3	
Internship	75 Cr. Hrs		
Semester Credit Hours	•	15	

Seventh Semester			
Course Title	Pre-Req.	Credit	
Legal & Ethical Issues III	Legal & Ethical Issues II	1	
IT Project Management	None	3	
Graduation Project I	95 Cr. Hrs	2	
Introduction to Robotics	Introduction to Embedded Systems	3	
Computer Vision & Machine Learning	Digital Image Processing + Deep Learning	3	
Data Mining and Warehouse	Data Engineering and Analysis	3	
Student Selected Course		3	
Semester Credit Hours		18	

Eighth Semester			
Course Title	Pre-Req.	Credit	
Natural Language Processing	Deep Learning	3	
Graduation Project II	Graduation Project I	4	
Student Selected Course		3	
Student Selected Course		3	
Elective Course			
Semester Credit Hours		13	

## **Electives: students must select (3 courses) (9 credits) from the following:**

Student selected Courses		
Course Title	Pre-Req.	Credit
Logic and Knowledge Representation	Int. Artificial Intelligence	3
Big Data	Introduction to	3
	Data Science +	
	Data Engineering and Analysis	
Human Al Interaction	Int. Artificial Intelligence	3
Fuzzy Logic Systems	Int. Artificial Intelligence	3
Reasoning and Decision Making	Introduction to Data Science	3
Internet of Things: Foundations and Design	Int. Artificial Intelligence	3
Data Exploration and Visualization	Data Engineering	3
	and Analysis + Data	
	Mining and	
	Warehouse	
Expert Systems	Machine Learning	3