



Artificial Intelligence Track

First Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
ENGL 101	English Language –1	2		Required
COCS 100	Computer skills	3		Required
COCS 111	Introduction to Programming	3		Required
MATH 101	Calculus –1	3		Required
PHYS 101	General Physics –1	3		Required
STAT 101	Probability and Statistics	3		Required
Total Credit Hours			17	

Second Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
ENGL102	English Language –2	2	ENGL 101	Required
ISLM 100	Islamic Culture –1	2		Required
COCS 121	Computational Discrete Math	3	MATH 101	Required
COCS 122	Object Oriented Programming	4	COCS 111	Required
COCS 123	Introduction to Database	3	COCS 111	Required
MATH 211	Calculus –2	3	MATH 101	Required
Total Credit Hours			17	

Third Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
ENGL 201	Academic Writing	2	ENGL 102	Required
COCS 211	Data Structures	4	COCS 122	Required
COCS 212	Digital Logic Design	3	COCS 121	Required
MATH 221	Linear Algebra	3	MATH 101	Required
COCS 213	Computer Organization and Architecture	3	COCS 212	Required
COCS 214	Computer Ethics	2		Required
Total Credit Hours			17	



Fourth Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
COCS 221	Visual Programming	3	COCS 122	Required
COCS 222	Design and Analysis of Algorithms	3	COCS 211	Required
COCS 223	Principles of Software Engineering	3	COCS 122	Required
COCS 224	Operating Systems	3	COCS 313	Required
COCS 226	Human Computer Interaction	3	COCS 122	Required
COCS 225	Computer Networks	3	COCS 322	Required
Total Credit Hours			18	

Fifth Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
XXXX	Free Course –1	3		Required
COAI 311	Artificial Intelligence fundamentals	3	COCS 211	Required
COAI 312	Foundations of Data Analytics	3	COCS 314	Required
COAI 313	Machine Learning	3	COCS 314	Required
COCS 314	Software project management	3	COCS 311	Required
COAI 314	Natural Language Processing	3	COCS 314	Required
Total Credit Hours			18	

Sixth Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
COAI 321	Pattern Recognition	3	COCS 314	Required
COAI 322	Artificial Neural Networks	3	COCS 412	Required
COAI 323	Introduction to Robotics	3	COCS 122	Required
COAI 324	Image Processing	3	COCS 311	Required
Elec I	Elective Course –1	3		Elective
Total Credit Hours			15	



Seventh Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
XXXX	Free Course –2	3		Required
COAI 411	Multiagent systems	3	COAI 322	Required
COAI 412	Computer Vision	3	COAI 321	Required
COAI 413	Speech Recognition	3	COAI 314	Required
Elec II	Elective Course –2	3		Elective
COAI 419	Project –1	2		Required
Total Credit Hours			17	

Eighth Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
COCS 429	Project –2	3	COAI 419	Required
COCS 428	Internship	8	COAI 419	Required
Total Credit Hours			11	

Total Credit Hours: 130

List of elective courses

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
COAI 431	Advanced Machine Learning	3	COCS 313	Elective
COAI 432	Applied AI in Biomedicine	3		Elective
COAI 433	Parallel Computing	3	COCS 313	Elective
COAI 434	Topics in Applied Operational Research	3		Elective
COAI 435	Deep Learning	3		Elective