

Program Name: Computer Science (Artificial Intelligence Concentration)

COURSE	TITLE	LEC	LAB	CR	Pre-req	COURSE	TITLE	LEC	LAB	CR	Pre-req
FRESHMAN YEAR											
SEMESTER 1						SEMESTER 2					
CS 1001	Introduction to Computing	2	2	3	Co-requisite GCS 182	CS 1131	Advanced Programming	2	2	3	GCS 182
GMTH 181E	Pre-Calculus for Engineering	3	0	3	None	MATH 101	Calculus for Engineers I	3	0	3	GMTH 141E
GCS 182	Principles of Computing, Data and Algorithms	2	2	3	None	Choice	English Language II	3	0	3	GENG 131
GENG 131	Advanced English Language Skills & Critical Thinking	3	0	3	Placement	CS 1021	Computer Architecture and Organization	2	2	3	CS 1001
BIO 112	Introduction to Biology	2	3	3	None	GSTA 181	Introductory Statistics (Quantitative Reasoning)	3	0	3	None
Choice	Foreign Languages & Communication	1	2	2	None	GISL 121	Islam and Civil Society	3	0	3	None
Total				17		Total				18	

SOPHOMORE YEAR											
SEMESTER 3						SEMESTER 4					
CS 2071	Database Systems	2	2	3	GCS 182	CS 2111	Web Application Development	2	2	3	CS 2071
CS 2132	Object Oriented Programming	2	2	3	CS 1131	GSEM 100	Research Seminar	1	2	2	NONE
CS 2171	Ethics in Computing	2	0	2	None	CS 2011	Data Structures and Algorithms	2	2	3	CS 2132
MATH 201	Calculus for Engineers II	3	0	3	MATH 101	STAT 201	Statistics for Computing	3	0	3	MATH 201 & GSTA 140
Choice	Arabic Language	3	0	3	None	CS 3067	Information and Cyber Security	2	2	3	CS 1001
GPHY 171	Foundation in Physics (Physical & Environmental Sciences)	2	2	3	None	CS 2091	Computer Networks	2	2	3	CS 1021
Total				17		Total				17	

JUNIOR YEAR											
SEMESTER 5						SEMESTER 6					
CS 3081	Artificial Intelligence	2	2	3	STAT 201 and CS 2011	Choice	Creative Arts and Cultural Studies	3	0	3	
MATH 203	Discrete Mathematics	3	0	3	MATH 201	CS3151	Software Engineering	2	2	3	CS 2011
CS 3012	Algorithm Analysis	2	2	3	CS 2011	CS 3172	Research Projects in Computing	2	2	3	GSEM 200
CS 3101	Operating Systems	2	2	3	CS 1021 & CS 2011	MATH 310	Numerical Analysis	3	0	3	MATH 201 & CS 1131
GSEM 201	Research, Innovation and Intellectual Property	3	0	3	GSEM 100	Choice	Social Structure and Global Awareness	3	0	3	None
Choice	Social Structure and Global Awareness 1	3	0	3	None	Choice	Foreign Languages & Communication	1	2	2	None
Total				18		Total				17	

SUMMER SESSION					
CS 3173	Summer Training	0	0	2	CS 3172

SENIOR YEAR											
SEMESTER 7						SEMESTER 8					
MATH 307	Linear Algebra	3	0	3	MATH 201	CS 4175	Senior Project 2	0	0	3	CS4174
CS3133	Programming Languages	2	2	3	CS 3172		Artificial Intelligence Concentration Elective 2	2	2	3	None
CS 4174	Senior Project 1	3	0	3			Artificial Intelligence Concentration Elective 3	2	2	3	None
Choice	Technical Elective	2	2	3			Artificial Intelligence Concentration Elective 4	2	2	3	
	Artificial Intelligence Concentration Elective 1	2	2	3							
Total				15		Total				12	

Total credit hours required:

133