

BACHELOR OF SCIENCE IN ARTIFICIAL INTELLIGENCE

FRESHMAN YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course Number	Course Title	Credit Hours	Pre-requisite	Course Number	Course Title	Credit Hours	Pre-requisite
ALIS 1211	Introduction to Islamic Culture	2		ALIS 1212	The Social System in Islam	2	
COMM 1311	Written Communication	3		COMM 1312	Writing and Research	3	COMM 1311
UNIV 1211	Prof. Development and Competencies	2		UNIV 1212	Critical Thinking and Problem Solving	2	
MATH 1422	Calculus I	4	PRPM 0022	PHYS 1421	Physics for Engineers I	4	PRPM 0022
GEIT 1411	Computer Science I	4		GEIT 1412	Computer Science II	4	GEIT 1411
PHED 1111	Active Living Lifestyle	1		MATH 1423	Calculus II	4	MATH 1422
Total Credit Hours		16		Total Credit Hours		19	

SOPHOMORE YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course Number	Course Title	Credit Hours	Pre-requisite	Course Number	Course Title	Credit Hours	Pre-requisite
ALIS 2211	Linguistic Communication Skills	2	ALIS 1212	ALIS 2212	The Biography of Prophet Mohammad	2	
UNIV 1213	Leadership and Teamwork	2		COMM 2312	Technical and Professional Communications	3	COMM 2311
PHYS 1422	Physics for Engineers II	4	PHYS1421 MATH 1422	ASSE 2111	Learning Outcome Assessment I	1	Sophomore Level
GEIT 2291	Professional Ethics	2		GEIT 2331	Mathematical Reasoning and Algorithmic Thinking	3	GEIT 1412
GEIT 2421	Data Structures	4	GEIT 1412	AINT 2412	Scripting Languages for AI	4	GEIT 1412
COMM 2311	Oral Communication	3	COMM 1312	AINT 2311	Introduction to AI	3	GEIT 2421
PHED 1112	Healthy Behaviors and Management	1		MATH 2313	Probability and Statistics	3	MATH 1422
Total Credit Hours		18		Total Credit Hours		19	

JUNIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course Number	Course Title	Credit Hours	Pre-requisite	Course Number	Course Title	Credit Hours	Pre-requisite
AINT 3332	Discrete Structures and Combinatorial Analysis	3	GEIT 2331	GEIT 3351	Principles of Software Engineering	3	GEIT 1412
GEIT 3341	Database I	3	GEIT 1412	AINT 3421	Deep Learning	4	AINT 3411
AINT 3411	Introduction to Machine Learning	4	AINT 2412 MATH 2313	AINT 3351	Algorithms	3	GEIT 2421
MATH 3433	Linear Algebra and Differential Equation	4	MATH 1423		AI Elective I***	3	
ASSE 3211	Learning Outcome Assessment II	2	ASSE 2111		Natural Science Elective**	4	
GEIT 3331	Computer Organization	3	GEIT 1412				
Total Credit Hours		19		Total Credit Hours		17	

SUMMER OF JUNIOR YEAR				
Course Number	Course Title	Credit Hours		Pre-requisite
GEIT 4361	Internship	3	8 weeks (320 hours) full time	End of Junior Year (summer before graduation) and department approval

SENIOR YEAR							
FIRST SEMESTER				SECOND SEMESTER			
Course Number	Course Title	Credit Hours	Pre-requisite	Course Number	Course Title	Credit Hours	Pre-requisite
AINT 4373	Computer Vision	3	MATH 3433		AI Elective III***	3	
ASSE 4311 - AI	Assessment III - AI (<i>Capstone</i>)	3	ASSE 3211		Social Science Elective II*	3	
	Social Science Elective I*	3			AI Elective IV***	3	
	AI Elective II***	3					
Total Credit Hours		12		Total Credit Hours		9	
TOTAL DEGREE CREDIT HOURS = 132							

Electives:

*Social Science Electives		**Natural Science Electives	
FREN 1311	Introduction to French Language	BIOL1411	Introductory Biology
FURS 1311	Introduction to Futures Skills	CHEM1411	Introductory Chemistry
FUTR 1311	Introduction to Futures Studies	CHEM1421	Chemistry for Engineers I
GEGR 1311	World Regional Geography	CHEM1422	Chemistry for Engineers II
HIST 1311	World Civilizations	PHYS1411	Introductory Physics
PSYC 1311	Introduction to Psychology		
SERV 1311	Introduction to Service Learning and Volunteering		
SPAN 1311	Introduction to Spanish Language		
SUST 1311	Introduction to Sustainability		
SYST 1311	Introduction to Systems Thinking		

***AI Electives (Tracks)					
Course Code	Course Title	Pre-requisite	Course Code	Course Title	Pre-requisite
AINT 3354	Introduction to Cryptography	GEIT2421	AINT 4380	Quantum Information and Computation	AINT3351
AINT 4371	Computer Graphics	GEIT2421	AINT 3361	Computer Networks	GEIT 2421
AINT 3357	Logic and Formal Verification	GEIT2331	AINT 4311	Parallel Computing	AINT3351
AINT 4372	Distributed Systems and Algorithms	AINT 3351	AINT 4361	Operating Systems	GEIT 3331
AINT 4362	Multi Agent Systems	AINT 3411	AINT 3371	Database II	GEIT3341
AINT 3381	Big Data Analytics	AINT 3411	AINT 4393	Special Topics	OVER 90 Credit Hours
AINT 4374	Text Mining	AINT 3411			
AINT 4381	Intelligent Robotics	AINT 3411			
AINT 4376	Bioinformatics	AINT 3351			

