College of Computing

Bachelor of Science in Artificial Intelligence Program

1. Overview

This program is designed to grant students the Bachelor of Science in Artificial Intelligence degree upon completing the four-year program.

2. University Graduation Requirements

University Requirements consist of 37 hours distributed as follows:

2.1 University Compulsory Requirements   (34 Cr.)

Course Code	Course Title	Pre-Requisite Courses	Credit Hours
ENGL 100	General English		3
ENGL 206	Technical Writing	ENGL 102	3
MATH 100	Mathematics I		3
PHE 101	Physical and Health Education		1
ENGL 101	Basic Academic English I		3
SOCS 101	Islamic Civilization I		3
ENGL 102	Basic Academic English II	ENGL 101	3
ARAB 101	Basic Academic Arabic		3
ARAB 201	Advanced Academic Arabic	ARAB 101	3
ENGL 203	Advanced Academic English I	ENGL 102	3
STAT 100	Introduction to Probability and Statistics	Math 100	3
IT 100	Information Technology		3
Total			**34**

2.2 A Free Elective Course: 3 credit hours selected from the following list:

Course Code	Course Title	Pre-Requisite Courses	Credit Hours
FREN 101	Basic French I		3
CIT 101	Future Technologies		3
SOCS 201	Islamic Civilization II	SOCS 101	3
SOCS 202	World Civilization		3
SOCS 203	History of the Kingdom of Saudi Arabia		3
ASTR 150	Introduction to Astronomy		3
CHEM 150	Chemistry & Society		3

3. College Requirements

College Requirements consist of 37 credit hours distributed as follows:

Course Code	Course Title	Pre-Requisite Courses	Type of requirements (Institution, College or Department)	Credit Hours
CSC 100	Introduction to Computing		C	3
MATH 101	Calculus I		C	3
PHYS 101	General Physics I		C	3
PHYS 101L	General Physics I Lab	PHYS 101	C	1
MATH 102	Calculus II	MATH 101	C	3
STAT 230	Probability and Statistics	MATH 201	C	3
CEN 220	Logic Design	MATH 211(co)	C	3
CEN 220L	Logic Design Lab	CEN 220	C	1
CSC 102	Computer Programming I	CSC 100	C	3
CSC 102L	Computer Programming I Lab	CSC 102	C	1
CSC 212	Algorithms and Data Structure	CSC 102	C	3
CEN 221	Computer Organization and Assembly Language		C	3
CEN 221L	Computer Organization and Assembly Lang. Lab	CEN 221	C	1
CSC 492	Computing Ethics		C	3
CEN 320	Computer Architecture	CEN 221	C	3
Total				**37**

4. Program Specialization Requirements

Program specialization requirements consist of 64 credit hours: 52 compulsory credit
hours and 12 elective credit hours distributed.

4.1. Compulsory Specialization Requirements: (52 Cr.)

Course Code	Course Title	Pre-Requisite Courses	Credit Hours
CIT 114	Programming with Python		3
CIT 130	Introduction to web design and development		3
CIT 235	Data Analysis and Design	CIT 114	3
CIT 241	Fundamentals of E-Commerce	CIT 130	3
CIT 350	Database Systems	Senior standing	3
CIT 350L	Database Systems Lab	CIT 350	1
CIT 356	Machine Learning, I	CIT 235	3
CIT 385	Computer Vision	CSC 356	3
CIT 389	Natural Language Processing	CIT 235	3
CIT 387	Artificial Intelligence	STAT 230	3
CIT 398	Internship		1
CIT 470	Project Management	CSC 382	3
CIT 472	Human Computer Interaction		3
CIT 476	Machine Learning II	CIT 356	3
CIT 498	Final Year Project I	Senior standing	1
CIT 499	Final Year Project II	CIT 498	3
CSC 201	Computer Programming II	CSC 102	3
CSC 201L	Computer Programming II Lab	CSC 201	1
CSC 356	Design and Analysis of Algorithms	CSC 212	3
CSC 382	Software Engineering		3
		Total	**52**

4.2. Program Specialization Electives: (12 Cr.)

Course code	Course Title	Pre-Requisite	Credit Hours
CIT 382	Evolutionary Computation and Global Optimization		3
MATH 215	Linear Algebra	MATH 102	3
** CIT 304	Introduction To Big Data		3
** CSC 372	Operating Systems		3
CSC 386	Advanced Computer Graphics		3
CIT 397	Selected Topics in Machine Learning		3
CIT 240	Fundamentals of Data Mining		3
** CIT 482	Computer Network and Cryptography		3
** CIT 372	Cloud Computing and Security		3
** CIT 364	Wireless & Mobile Computing		3
CIT 306	Deep Learning	STAT 201, CSC 387	3
CIT 360	Advanced Software Engineering	CSC 382	3
CIT 380	Information and Innovation Management		3
CIT 112	Introduction to Programming concepts and Design		3