

# ARTIFICIAL INTELLIGENCE CONCENTRATION, COMPUTER SCIENCE (BS)

## Major Requirements

### First Year

Course	Title	Quarter Hours
CSC 241	INTRODUCTION TO COMPUTER SCIENCE I <sup>1</sup>	4
CSC 242	INTRODUCTION TO COMPUTER SCIENCE II <sup>1</sup>	4
CSC 300	DATA STRUCTURES I	4
IT 223	DATA ANALYSIS	4
MAT 140	DISCRETE MATHEMATICS I	4
MAT 141	DISCRETE MATHEMATICS II	4

<sup>1</sup> Students with one semester programming experience may take CSC 243 and one (1) Major Elective in lieu of CSC 241 and CSC 242.

### Second Year

Course	Title	Quarter Hours
CSC 297 or CSC 299	APPLIED AI LAB SOPHOMORE LAB IN APPLIED COMPUTING	4
CSC 301	DATA STRUCTURES II	4
CSC 321	DESIGN AND ANALYSIS OF ALGORITHMS	4
CSC 347	CONCEPTS OF PROGRAMMING LANGUAGES	4
CSC 373	COMPUTER SYSTEMS I	4
CSC 374	COMPUTER SYSTEMS II	4
WRD 204	TECHNICAL WRITING	4

### Third Year

Course	Title	Quarter Hours
CSC 380	FOUNDATIONS OF ARTIFICIAL INTELLIGENCE	4
CSC 384	ETHICS IN ARTIFICIAL INTELLIGENCE	4
DSC 345	MACHINE LEARNING	4
MAT 150	CALCULUS I	4
MAT 220	APPLIED LINEAR ALGEBRA	4
SE 350	OBJECT-ORIENTED SOFTWARE DEVELOPMENT	4

### Fourth Year

Course	Title	Quarter Hours
CSC 383	DEEP LEARNING	4
CSC 394	SOFTWARE PROJECTS	4
Two courses from the Major Electives list		8

One course from any 300-level CSC, CSE, SE, CSEC, DS or GAM course 4

### Major Electives

Course	Title	Quarter Hours
CSC 358	SYMBOLIC PROGRAMMING	
CSC 381	INTRODUCTION TO DIGITAL IMAGE PROCESSING	
CSC 382	APPLIED IMAGE ANALYSIS	
CSC 397	TOPICS IN COMPUTER SCIENCE	
CSE 375	INTRODUCTION TO ROBOTICS	
DSC 323	DATA ANALYSIS AND REGRESSION	
DSC 324	ADVANCED DATA ANALYSIS	
DSC 333	INTRODUCTION TO BIG DATA PROCESSING	
DSC 365	DATA VISUALIZATION	

### Open Electives

Open Elective Credit Hours are required to meet the minimum graduation requirements of 192 hours. Open Electives may be taken from any unit at DePaul.