

ARTIFICIAL INTELLIGENCE (BS)

Code	Title	Units
Major Requirements ¹		
Computer Science Core:		
COMPSCI 170	INTRODUCTION TO PYTHON PROGRAMMING	3
or ITSCM 180	INTRODUCTION TO PROGRAMMING FOR BUSINESS APPLICATIONS	
COMPSCI 218	INTERMEDIATE PROGRAMMING IN PYTHON	3
COMPSCI 223	DATA STRUCTURES	3
COMPSCI 364	CLOUD SOFTWARE DEVELOPMENT	3
COMPSCI 366	DATABASE MANAGEMENT SYSTEMS	3
COMPSCI 433	THEORY OF ALGORITHMS	3
or COMPSCI 434	THEORY OF COMPUTATION	
Artificial Intelligence Core:		
COMPSCI 182	GENERATIVE AI APPLICATIONS	3
COMPSCI 332	INTRODUCTION TO ARTIFICIAL INTELLIGENCE	3
COMPSCI 432	INTRODUCTION TO MACHINE LEARNING	3
COMPSCI 437	NATURAL LANGUAGE PROCESSING AND LARGE LANGUAGE MODELING	3
COMPSCI 468	INTRODUCTION TO DEEP LEARNING	3
COMPSCI 469	MACHINE LEARNING OPERATIONS	3
PHILSPHY 303	ETHICS OF ARTIFICIAL INTELLIGENCE	3
PSYCH 351	COGNITIVE PSYCHOLOGY	3
or PSYCH 303	LEARNING AND CONDITIONING	
Technical Electives: Select 6 units ²		6
COMPSCI 446	DISTRIBUTED MACHINE LEARNING	
COMPSCI 454	MACHINE LEARNING FOR CYBERSECURITY	
COMPSCI 467	REINFORCEMENT LEARNING	
COMPSCI 493	INTERNSHIP IN COMPUTER SCIENCE ³	
COMPSCI 736	IMAGE PROCESSING AND COMPUTER VISION	
COMPSCI 767	BIG DATA AND DATA MINING	
ITSCM 414	TEXT MINING & GENERATIVE AI	
Application Elective: Select 3 units		3
COMPSCI 312	INTERMEDIATE DATA SCIENCE	
or BIOLOGY 312	INTERMEDIATE DATA SCIENCE	
COMPSCI 448	BIOINFORMATICS	
or BIOLOGY 448	BIOINFORMATICS	
COMPSCI 476	SOFTWARE ENGINEERING	
COMPSCI 493	INTERNSHIP IN COMPUTER SCIENCE ³	
ECON 350	BIG DATA METHODS FOR BUSINESS	
ENGLISH 281	INTRODUCTION TO LANGUAGE STUDY	
or PWP 310	THE GRAMMAR OF STANDARD WRITTEN ENGLISH	
ITSCM 382	DATA VISUALIZATION AND STORYTELLING IN BUSINESS	

ITSCM 385	AGILE PROJECT MANAGEMENT	
STAT 423	EXPERIMENTAL DESIGN AND ANALYSIS OF VARIANCE	
Total Units		51

¹ An approved minor is not required for this major. However, the MATH and STAT courses in this major's unique requirements may be used to complete a minor in Mathematics. Consult your advisor or the Department of Mathematics for more information.

² Graduate courses (500+) may have additional requirements prior to enrollment by undergraduate students. See the Seniors Taking Graduate Courses Policy for further information.

³ Internship must be related to artificial intelligence or software development. Department approval is required.

Code	Title	Units
Unique Requirements:		
ENGLISH 370	ADVANCED COMPOSITION	3
or PWP 332	WRITING FOR THE WEB	
or PWP 372	TECHNICAL AND PROFESSIONAL WRITING	
MATH 253	CALCULUS AND ANALYTIC GEOMETRY I	5
MATH 254	CALCULUS AND ANALYTIC GEOMETRY II	4
MATH 255	CALCULUS AND ANALYTIC GEOMETRY III	4
MATH 280	DISCRETE MATHEMATICS	3
or COMPSCI 215	DISCRETE STRUCTURES	
MATH 355	MATRICES AND LINEAR ALGEBRA	3
PSYCH 211	INTRODUCTORY PSYCHOLOGY	3
STAT 342	APPLIED STATISTICS	3