ARTIFICIAL INTELLIGENCE, BACHELOR OF SCIENCE IN ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) is a multidisciplinary field of computing that integrates principles from machine learning, natural language processing, computer vision, robotics, generative AI, and large language models (LLMs) to develop algorithms and software enabling machines to perform tasks that typically require human intelligence. As the field of AI continues its rapid advancement, it is pushing the boundaries of technological possibilities and is expected to be in great demand within the future workforce.

Artificial Intelligence, Bachelor of Science in Artificial Intelligence Requirements

A minimum of 120 credit hours is required for a Bachelor of Science degree in Artificial Intelligence. Thirty of the last 36 hours must be University of Nebraska at Omaha courses. Registering for courses without having taken the stated prerequisites could result in administrative withdrawal. Students must have a C or better grade in CIST 1400 and CSCI 1620 to serve as the prerequisite for all subsequent Computer Science (CSCI) courses. For all other courses applied towards the major, a grade of C- or better will meet the prerequisite and degree requirements.

To obtain an artificial intelligence degree, a student must fulfill the University General Education, College, and Departmental requirements. Some courses may satisfy requirements in more than one area, but credit is awarded only once, thereby reducing the total number of credit hours for the degree to 120. (This total does not include prerequisites.)

Code	Title	Credits
GENERAL EDUCATION REQUIREMENTS - 34 Hours Required		
Minimum of "C-"required		
Fundamental Skills		15
Writing – 6 hrs.		
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	
Oral Communication – 3 hrs.		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
Quantitative Literacy – 3 hrs.		
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
Data Literacy – 3 hrs.		
Select one from the following:		
STAT 1100	DATA LITERACY AND VISUALIZATION	
STAT 1530	ELEMENTARY STATISTICS	

Until Fall 2028, students can satisfy this requirement with an approved data literacy course, or any approved natural or social science general education course.

Breadth of Knowledge		13
Social Science – 3 hrs.		
Humanities – 3 hrs.		
Natural & Physical Science (must complete a lab) – 4 hrs.		
Arts – 3 hrs.		
Individual and Social Responsibility		6
Cultural Knowledge – 3 hrs.		
Civic Knowledge and Engagement – 3 hrs.		
MAJOR REQUIREMENTS - 65 Hours Required		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
All of the following:		47
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I (^)	
CSCI 1620	INTRODUCTION TO COMPUTER SCIENCE II (^)	
MATH 1950	CALCULUS I (^)	
CSCI 2030	MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE (^)	
MATH 2050	APPLIED LINEAR ALGEBRA (^)	
AIML 2060	CONCEPTS OF ARTIFICIAL INTELLIGENCE (^)	
CSCI 2410	INTRODUCTION TO DATA ANALYTICS USING PYTHON (^)	
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T (^)	
CIST 3000	TECHNICAL WRITING & COMMUNICATION FOR IS&T (^)	
CIST 3110	INFORMATION TECHNOLOGY ETHICS (** ^)	
CSCI 3320	DATA STRUCTURES (^)	
CSCI 3470	FUNDAMENTALS AND ALGORITHMS OF MACHINE LEARNING (^)	
CSCI 4100	INTRODUCTION TO ALGORITHMS (^)	
CSCI 4450	PRINCIPLES OF ARTIFICIAL INTELLIGENCE (^)	
AIML 4970	AI CAPSTONE (^)	
Extension Courses – Complete 6 courses		18
Any CSCI courses numbered 2xxx-4xxxx which are not used to meet other BSAI degree requirements		
PHIL 2010	SYMBOLIC LOGIC	
ISQA 4010	BUSINESS INTELLIGENCE (^)	
MATH/STAT 4450	INTRODUCTION TO MACHINE LEARNING AND DATA MINING (^)	

ELECTIVES

Elective hours as required to reach a total of 120 hours

Artificial Intelligence, Bachelor of Science in Artificial Intelligence Four Year Plan - Start 1300-1200-1280

First Year

Fall

		Credits
ENGL 1150	ENGLISH COMPOSITION I	3
MATH 1950	CALCULUS I	5
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3
CIST 1300 or CSCI 1200 or CSCI 1280	INTRODUCTION TO WEB DEVELOPMENT or COMPUTER SCIENCE PRINCIPLES or INTRODUCTION TO COMPUTATIONAL SCIENCE	3
Elective course		1
	Credits	15

Spring

		Credits
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	3
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I	3
General Education Course or Elective		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	15

Second Year

Fall

		Credits
CSCI 1620	INTRODUCTION TO COMPUTER SCIENCE II	3
CSCI 2030	MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE	3
General Education Course or Elective		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	15

Spring

		Credits
AIML 2060	CONCEPTS OF ARTIFICIAL INTELLIGENCE	3
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T	3
General Education Course or Elective		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	15

Third Year

Fall

		Credits
CSCI 2410	INTRODUCTION TO DATA ANALYTICS USING PYTHON	3
CSCI 3320	DATA STRUCTURES	3
CIST 3110	INFORMATION TECHNOLOGY ETHICS	3
MATH 2050	APPLIED LINEAR ALGEBRA	3
General Education Course or Elective		3
	Credits	15

Spring

		Credits
CSCI 3470	FUNDAMENTALS AND ALGORITHMS OF MACHINE LEARNING	3
CSCI 4100	INTRODUCTION TO ALGORITHMS	3
Extension Course		3
Extension Course		3
General Education Course or Elective		3
	Credits	15

Fourth Year

Fall

		Credits
CIST 3000	TECHNICAL WRITING & COMMUNICATION FOR IS&T	3
CSCI 4450	PRINCIPLES OF ARTIFICIAL INTELLIGENCE	3
General Education Course or Elective		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	15

Spring

		Credits
AIML 4970	Capstone	3
Extension Course		3
Extension Course		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	15
	Total Credits	120

Artificial Intelligence, Bachelor of Science in Artificial Intelligence Four Year Plan- Start 1400

First Year

Fall

		Credits
ENGL 1150	ENGLISH COMPOSITION I	3
MATH 1950	CALCULUS I	5
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I	3
Elective Course		1
	Credits	15

Spring

		Credits
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	3
CSCI 1620	INTRODUCTION TO COMPUTER SCIENCE II	3
General Education Course or Elective		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	15

Second Year

Fall

		Credits
CSCI 2030	MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE	3
AIML 2060	CONCEPTS OF ARTIFICIAL INTELLIGENCE	3
General Education Course or Elective		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	15

Spring

CSCI 3320	DATA STRUCTURES	3
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T	3
General Education Course or Elective		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	**15**

Third Year

Fall

CIST 3110	INFORMATION TECHNOLOGY ETHICS	3
CSCI 2410	INTRODUCTION TO DATA ANALYTICS USING PYTHON	3
MATH 2050	APPLIED LINEAR ALGEBRA	3
Extension Course		3
General Education Course or Elective		3
	Credits	**15**

Spring

CSCI 3470	FUNDAMENTALS AND ALGORITHMS OF MACHINE LEARNING	3
CSCI 4100	INTRODUCTION TO ALGORITHMS	3
CIST 3000	TECHNICAL WRITING & COMMUNICATION FOR IS&T	3
Extension Course		3
General Education Course or Elective		3
	Credits	**15**

Fourth Year

Fall

CSCI 4450	PRINCIPLES OF ARTIFICIAL INTELLIGENCE	3
Extension Course		3
Extension Course		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	**15**

Spring

AIML 4970	Capstone	3
Extension Course		3
Extension Course		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	**15**
	Total Credits	**120**