

Artificial Intelligence Major

University Degree Requirements

For complete details on these and other university degree requirements, refer to the Degree and Graduation Requirements (<https://catalog.ndsu.edu/academic-policies/undergraduate-policies/degree-and-graduation/>) section in the University Catalog.

1. Minimum of 120 semester credits (some programs may exceed this minimum).
2. Complete the University General Education requirements.
3. Minimum institutional GPA of 2.00 based on work taken at NDSU.
4. Minimum of 30 credits in resident at NDSU.
5. Minimum of 36 upper level credits (courses numbered 300 or higher).
6. Students with transfer credit must meet the NDSU 30 credits in residence (#4). Of these 30 credits in residence, a minimum of 15 credits must be in courses numbered 300 or above, and 15 credits must be in the student's declared major curricula.

University General Education Requirements

A list of university approved general education courses along with the administrative policies governing the requirement and the categories is available

Code	Title	Credits
Category C: Communication		12
Category R: Quantitative Reasoning		3
Category S: Science and Technology		10
Category A: Humanities and Fine Arts		6
Category B: Social and Behavioral Sciences		6
Category W: Wellness		2
Category D: Cultural Diversity		
Category G: Global Perspectives		
Category L: Digital Literacy		
Total Credits		39

Major Requirements

A grade of C or better is required for all CSCI or AI prefix courses.

Code	Title	Credits
Core Requirements		
CSCI 121	Artificial Intelligence for Everyone	3
CSCI 161	Computer Science II	4
CSCI 170	Social Impacts of Artificial Intelligence	3
CSCI 213	Modern Software Development With AI Tools	3
CSCI 222	Discrete Mathematics	3
CSCI 227 or CSCI 160	Computing Fundamentals in Python I Computer Science I	3
CSCI 228	Computing Fundamentals in Python II	3
CSCI 277	Introduction to UNIX	3
CSCI 305	Principles of Cybersecurity	3
CSCI 312 or CSCI 372	Survey of Programming Languages Comparative Programming Languages	3
CSCI 313	Software Development with Frameworks	3
CSCI 366	Database Systems	3
CSCI 420	Introduction to Data Science in Python	3
CSCI 421	Natural Language Processing and Large Language Models	3
CSCI 422	Fundamentals of Data Engineering	3
CSCI 424	Privacy and Data Security in Artificial Intelligence	3

CSCI 425	Machine Learning	3
CSCI 426	Introduction to Artificial Intelligence	3
CSCI 436	Computational Intelligence	3
CSCI 445	Software Projects Capstone	3
CSCI 450	Cloud Computing	3
CSCI 488	Human-Computer Interaction	3
COMM 112	Understanding Media and Social Change	3
ENGR 327	Ethics, Engineering, and Technology	3
MATH 129	Basic Linear Algebra	3
MATH 165	Calculus I	4
MATH 166	Calculus II	4
PSYC 111	Introduction to Psychology	3
STAT 367	Probability	3
STAT 368	Statistics	3
Technical Electives		
Select two courses from the following:		6
ENGR 321	Introduction to Robotics	
CSCI 407	Cybersecurity in the Age of Artificial Intelligence	
CSCI 423	Computer Vision and Multimodal Artificial Intelligence	
ECE 477	Hardware Design for Machine Learning	
STAT 412	Statistics for Data Science using R	
CSCI or AI	Any 400 level CSCI or AI prefix course not listed as a core requirement	
Total Credits		99