




Office of the Provost and
Senior Vice President for Academic Affairs

Phone: (906) 487-2440
Fax: (906) 487-2935

TO: Richard Koubek, President

FROM: Andrew Storer, Provost & Senior Vice President for Academic Affairs 

DATE: March 30, 2026

SUBJECT: Senate Proposal 15-26

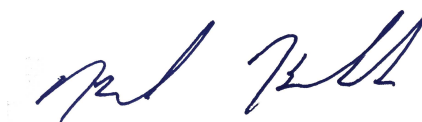
Attached is Senate proposal 15-26, "Bachelor of Science in Artificial Intelligence," and a memo stating the Senate passed this proposal at their March 19, 2026 meeting. I have reviewed this memo and recommend approving the proposal.

If you concur with my recommendation, the provost's office will work with the dean to clarify an approval process for technical electives and seek the following approvals.

- Board of Trustees
- Michigan Association of State Universities (MASU)
- Higher Learning Commission (HLC); screening required for all degree programs as well certificates

Programs cannot be fully advertised until all noted approvals are obtained. Once Board of Trustees approval has been granted, limited advertising to make prospective students aware of the planned program may be conducted so long as any outstanding regulatory approvals are noted, e.g., "pending state and Higher Learning Commission approval".

I concur do not concur _____ with the provost's recommendation as stated in this memo.



Richard Koubek, President

3/31/26

Date



DATE: March 19, 2026
TO: Richard Koubek, President
FROM: Robert Hutchinson, University Senate President
SUBJECT: Proposal 15-26
COPIES: Andrew Storer, Provost & Senior VP for Academic Affairs

At its meeting on March 19, 2026, the University Senate approved Proposal 15-26, “Bachelor of Science in Artificial Intelligence.” Feel free to contact me if you have any questions.

The University Senate of Michigan Technological University

Proposal 15-26

(Voting Units: Academic)

Bachelor of Science in Artificial Intelligence

Basic Program Information

Primary Contact: Zhenlin Wang, Chair, Computer Science;
Laura Brown, Associate Dean of Data Science Initiatives, College of Computing;
Yu Cai, Associate Dean, College of Computing

Program / Degree type: Bachelor of Science

Program Title: Bachelor of Science in Artificial Intelligence

Planned Implementation Date: Fall 2026

Program location / modality: Face to face

Target student Population: new and existing students

General description and characteristics of program

The proposed B.S. in Artificial Intelligence (AI) is centered on the technical foundations of artificial intelligence supported by fundamental elements from computer science, data science, and mathematics/statistics. The AI workforce is expanding rapidly across computing, healthcare, manufacturing, finance and national security. Employers need graduates who can develop new AI algorithms and systems along with hands-on experience in AI tools and applications. National trends point to AI degrees as a natural complement to existing Computer Science (CS) and Data Science (DS) programs. However, the B.S. in AI is not just another CS or DS degree. While CS provides broad computing foundations and Data Science emphasizes statistics and data analysis, the AI degree focuses on designing, developing, and deploying intelligent systems that can learn, adapt, and act in the world. Specifically, the program focuses on machine learning and deep learning with electives in natural language processing, computer vision, and robotics. The degree also provides focus areas/tracks where students may deepen their knowledge, e.g. the traditional system-focused CS concentration can become a track. Similarly, the emphasis in data analysis and data engineering by the DS degree can be a track in the AI degree. The current strong degree programs in CS, DS and Math at Michigan Tech provide a strong foundation for the new program. The majority of the core courses come directly from these programs.

The program requires 120 credits. The curriculum has 55 credits in the AI core/major requirements (including 3 credits in content related to ethics and 3 credits for a capstone experience), 12 technical elective credits in AI courses, 15 credits in a technical focus area, and

21 credits of Essential Education (note, 15 credits of the essential education requirements are included in the major requirements).

The technical focus area provides students with the opportunity to strengthen their background and skills in a specialized area aligned with their career goals. In some focus areas, students can also earn a minor. For example, students completing the Data Center focus may earn a minor in Computer Science, while those in the Business Technology focus area may earn the Business IT Solutions minor. Additional focus area options are possible, including the option for students to design their own in consultation with, and subject to the approval of, the program director. Our intent is to develop more prescribed focus area/minor combinations over time, in collaboration with other academic units on campus.

The proposed program recognizes that AI is not only a technical discipline but also a social and ethical one. The curriculum integrates ethical, political, and social considerations alongside core technical training. This approach reflects the growing consensus that responsible AI development requires graduates who understand both algorithmic design and its real-world impacts on society, governance, and equity.

Rationale

AI has become a driving force for innovation across industries, and the demand for skilled AI professionals is growing rapidly. According to the [2025 Future of Jobs Report by the World Economic Forum](#), AI and big data analysis are projected to be among the most sought-after technical skills by employers by 2030. With the rapid adoption of generative AI, many entry-level computing jobs have already shifted toward AI-related roles. The job market analysis detailed later confirms this trend.

This degree program is designed to meet these evolving industry needs by preparing a highly skilled workforce specialized in AI, built on a strong foundation in computing. The program will appeal to students who are drawn to computing and wish to specialize in AI, as well as to those who seek to build a strong technical foundation in AI to support their careers in other disciplines or application domains. The program will also help shape Michigan Tech as a national leader in AI education.

The proposed program will build on the strong core foundations of our existing CS and DS degrees, while integrating AI/ML courses into its core curriculum and offering a wide range of application-focused electives.

Related programs: within MTU and at other institutions

Related Programs within MTU:

The closest related programs are the following:

- BS in Data Science
- BS in Computer Science

- BS in Software Engineering
- BS in Mathematics and Computer Science
- BS in Statistics
- BS in Business Analytics
- BS in Environmental Data Science

Related Programs in the Region:

Several other institutions have recently developed (or are developing programs) related to AI. Among the Michigan Association of State Universities (MASU), there are Artificial Intelligence programs at:

- Oakland University - BS / MS in Artificial Intelligence
<https://oakland.edu/secs/undergraduate-programs/artificial-intelligence/>
<https://oakland.edu/secs/masters-of-science-programs/artificial-intelligence/>
- University of Michigan - Flint - BS / MS in Artificial Intelligence
<https://www.umflint.edu/cit/undergrad/>
<https://www.umflint.edu/graduateprograms/artificial-intelligence-ms/>
- Grand Valley State University - BS / MS in Artificial Intelligence
<https://www.gvsu.edu/computing/artificial-intelligence-bs-85>
<https://www.gvsu.edu/computing/artificial-intelligence-ms-106>
- Ferris State University - BS in Artificial Intelligence
https://catalog.ferris.edu/preview_program.php?catoid=3&poid=1475&returnto=237

Additionally, a majority of MASU institutions have related programs in Data Science, Data Analytics, and/or Business Analytics.

National Programs

There has been growth in the number of MS and now BS degree programs in Artificial Intelligence nationwide. Several examples include:

- Purdue University - BS in Artificial Intelligence
<https://admissions.purdue.edu/majors/artificial-intelligence-science/>
- University of Pennsylvania - BSE in Artificial Intelligence
<https://ugradadm.seas.upenn.edu/majors-program-options/bachelor-of-science-in-engineering-bse/artificial-intelligence/>
- Illinois Institute of Technology - BS in Artificial Intelligence
<https://www.iit.edu/academics/programs/artificial-intelligence-bs>
- Carnegie Mellon University - BS in Artificial Intelligence
<https://www.cs.cmu.edu/bs-in-artificial-intelligence/>
- Drexel University - BS in Artificial Intelligence and Machine Learning
<https://drexel.edu/cci/academics/undergraduate-programs/bs-artificial-intelligence-machine-learning>
- Rice University - BS in Artificial Intelligence
<https://csweb.rice.edu/ai-undergraduate-program>

- [Dakota State University](https://dsu.edu/programs/artificial-intelligence-bs.html)
<https://dsu.edu/programs/artificial-intelligence-bs.html>

Additional institutions place a concentration or track within their computer science programs, e.g., Northeastern University, Kettering University, [Arizona State University](#), etc.

Job Market Analysis

The job market for graduates with a BS in AI degree is expanding rapidly, driven by the accelerating adoption of AI across industries. According to recent reports, demand for AI skills in U.S. job postings has grown more than threefold over the past decade ([Atlanta Fed](#)), with particularly strong growth in machine learning engineering and data science. The position of machine learning engineer saw a 13% quarter-over-quarter increase and a 41% year-over-year increase in 2025 ([Veritone](#)). Salaries are also highly competitive, with median annual wages for AI-related positions surpassing \$150,000 in 2025 ([Veritone](#)). These trends highlight strong labor market incentives for students pursuing AI-focused undergraduate programs.

According to the Lightcast Program Development and Review Report for the BS in AI, there were over 1.6 million AI-related jobs nationwide in 2024, with an estimated annual growth rate of 10.4%. The BS in AI is a relatively new academic program, with 77 related undergraduate degree offerings nationwide in 2023, and it has experienced strong growth in availability across institutions.

Projected Enrollment

Initial enrollment is expected to be 10 students with enrollment growing to 20, 40, 75 students in the following years. **The projected enrollment is based on the historical enrollment data from other recently established computing programs, such as the BS in Data Science and the BS in Cybersecurity, as well as interest data collected from prospective students.**

Specialized Accreditation Requirements

There are no currently applicable program criteria under ABET Computing Accreditation Commission (CAC). **But we plan to pursue ABET accreditation under the CAC general criteria once the program has new graduates.**

Professional Licensure Requirements

Not applicable

Curriculum Details

Learning Goals

Upon successful completion of the degree, students will be able to:

1. Analyze a complex computing problem and apply principles of computing, AI, and ML to identify solutions.
2. Design, implement, and evaluate an AI-focused solution to meet a given set of requirements.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in AI practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply theory, techniques, and tools from AI and ML and employ the resulting knowledge to satisfy stakeholders' needs.

Assessment Plan

An assessment plan for the university will be developed, following the model established for other computing BS degrees in the College of Computing. The majority of assessment activities will be conducted through core courses offered in computer science and data science.

Curriculum Design

The following courses would be part of the curriculum design. New courses are bolded. The minimum credits required for the degree: 120

Artificial Intelligence Core: **(minimum 57 credits)**

Computer Science:

- CS 1000/DATA 1000/SAT 1000 - Explorations - First Year Seminar (1 cr)
- (CS 1121 AND CS 1122) OR CS 1131 - Introductory Programming Sequence (5 cr min)
- CS 2311 - Discrete Structures (3 cr)
- CS 2321 - Data Structures (3 cr)
- **CS 2800 - Intro to AI Applications (new)** (3 cr)
- CS 3141 - Team Software (3 cr)
- **CS3xxx/SAT3xxxx Cloud Computing (new)** (3 cr)
- CS 4321 - Introduction to Algorithms (3 cr)
- CS 4801 - Foundations of Machine Learning (3 cr)
- CS 4811 - Artificial Intelligence (3 cr)
- *CS 4841 - Deep Learning (dual list CS 5841, must eliminate crosslist with EE to do so)* (3 cr)

Mathematics:

- MA 1160 OR MA 1161 - Calculus I (4 cr min)
- MA 2320 OR MA 2321 OR MA 2330 - Linear Algebra (2 cr min)
- MA 2710 OR MA 2720 - Statistical Analysis (3 cr min)

Data Science:

- DATA 1200 - Data Science with Python

- DATA 2201 - Foundations of Data Science

AI and Society (6 cr)

One of:

- HF 2000 Introduction to Engineering Psychology
- HF 2300 Introduction to Human-Centered Design
- HF 3850 Human Factors
- HU 3701 Philosophy of Technology
- HU 3845 Human-Machine Communication
- HU 3850 Automated Culture: Critical Approaches to AI
- SS 3801 Science, Technology, and Society
- **SS 3580, Technology and Society in History**

One of:

- CS 3000 Ethical and Social Impacts of Computing
- HU 3704 AI Ethics

Project / Capstone

- **CS 4991 (new)**/DATA 4991- Capstone Project (3 cr)

Focus Areas (choose 15 credits, not previously taken, from one track)

Theoretical Track

- MA 2160 - Calculus II
- MA 3720 - Probability
- MA 4710 - Regression
- MA 4330 - Adv. Linear Algebra
- MA 4790 - Predictive Modeling
- CS 3311 - Formal Models

Software Engineering Track:

- CS 3712 - Software Quality Assurance
- CS 4710 - Model-Driven Software Development
- CS 4711 - Software Process and Management
- CS 4770 - Software Architecture
- **CS 4xxx, Software Engineering with Generative AI: From AI-Assisted Coding to AI Engineering (new)**

Data Center Track:

- CS 1142 HW/SW Interface
- CS 3421 Computer Organization
- CS 3411 System Programming
- CS 3425 Databases
- CS 4461 / EE 4272 Computer Networks
- **CS 4xxx Parallel Computing (new)**
- SAT 4411 Data Center Operations

Cybersecurity Track:

- CS 4001 National Cybersecurity Policy and Law
- CS 4723 Network Security
- CS 4740 Development of Trusted Software
- CS 4471 Computer Security
- SAT 3812 Cybersecurity I
- SAT 4817 Penetration Test
- SAT 4520 Machine Learning for Security

Business Track:

- MIS 4000 - AI and Emerging Technologies for Business
- MIS 4100 - Business Analytics and IS Projects
- MIS 4200 - Management of Cyber Security
- MIS 4400 - Business Intelligence and Analytics
- MIS 4500 - System Design for Innovation and Entrepreneurship
- OSM 4300 - Project Management

Human Computer Interaction Track

- HF2000 - Intro to Engineering Psychology
- HF2300 - Intro Human Centered Design
- HF 3850 Human Factors
- HU 3130 Rhetoric of Science and Technology
- HU 3701 Philosophy of Technology
- HU 3845 Human-Machine Communication
- HU 3850 Automated Culture: Critical Approaches to AI
- SS 3801 Science, Technology, and Society
- MIS 4000 - AI and Emerging Technologies for Business
- CS 3760 - Front End Development and Accessibility
- CS 4761/5761 Human Robot Interaction
- No more than one of the following (3 cr max):
HU 4628 Usability Evaluation and Testing
HF 4880/5880 - Usability Assessment
- No more than one of the following (3 cr max):
MIS 3500 - User-Centered Design
CS 4760 User Interface Design and Implementation
HU 4635 Principles of User Interface Design
PSY4750 - Judgment and Decision making

Technical Electives (12 credits):

- Any 4000-level Track courses from above
- MA 2160 - Calculus II
- MA 3720 - Probability
- CS 3311 Formal Models of Computation
- CS 3425 - Databases
- CS 3461 - Introduction to Robotics

- **CS 4xxx - Computer Vision (new)**
- **CS 4xxx - Natural Language Processing (new)**
- **CS 4xxx - Special Topics in AI (new)**
- DATA 2600 - Data Visualization, Communication, & Abstraction
- EET 4501 - Applied Machine Learning
- **other courses subject to approval**

Essential Education

(37 credit requirement: 13 credits guaranteed through major, max 24 credits not met through major)

- Michigan Tech Seminar (1 cr): **met through major**
- Composition
- Foundations of the Human World:
- Math (3 cr): **met through the Mathematics list**
- Natural and Physical Science
- STEM (3 cr): **met through major**
- Distribution Pathway
- Communications Intensive:
- Arts and Culture
- Intercultural Competency
- SHAPE elective (3 cr): **met through AI and Society List**
- STEM (3 cr): **met through major**
- Essential Education Experience
- Activities for Well-Being and Success (3 courses /3 cr total)

Credit Totals

Major requirements: 57 + 12 (technical electives) + 15 (focus area) = 84 cr minimum

Essential Education not fulfilled by major: 24

Free electives: additional credits as needed to meet degree minimum

Total credits: 120 minimum

Model Schedule (120 credits)

Year 1	
Fall (16) CS 1000 Explorations in Computing (1) CS 1131 Intro to Programming (5) MA 1160 Calculus 1 (4) Essential Ed (3) Essential Ed (3)	Spring (15) MA 2320 Linear Algebra (2) DATA 1200 Data Science with Python (3) Focus Area or Tech Elective or Free Elective (3) Essential Ed (3) Free Elective (3) EssEd Well-being (1)

Year 2	
Fall (16) CS 2311 Discrete Structures (3) MA 2720 Statistical Analysis (3) DATA 2201 Founds of Data Science (3) Essential Ed (3) Free Elective (3) EssEd Well-being (1)	Spring (15) CS 2800 Intro to AI Apps (3) CS 2321 Data Structures (3) Focus Area (3) Essential Ed (3) AI and Society (3)
Year 3	
Fall (13) Focus Area (3) CS 4811 Artificial Intelligence (3) CS 3141 Team Software (3) CS/AC 3xxx Cloud Computing (3) EssEd Well-being (1)	Spring (15) CS 4801 Foundations of ML (3) CS 4321 Introduction to Algorithms (3) Focus Area (3) Tech Elective (3) Essential Ed (3)
Year 4	
Fall (15) CS 4841 Deep Learning (3) AI and Society (3) Focus Area (3) Tech Elective (3) Essential Ed (3)	Spring (15) Tech Elective (3) Tech Elective (3) Focus Area (3) CS/DATA 4991 - Capstone Project (3) Free Elective (3)

New Course Descriptions

The BS in AI will require two new courses as part of the core required courses (CS 2800 Introduction to AI Applications and CS 3xxx Cloud Computing). **The CS Department has designated instructors to develop and pilot the two proposed courses as CS 2090 and CS 3090 in the 2026–2027 academic year. The required new course add forms will be submitted in Fall 2026.** The remaining **new** courses would be developed as electives and rolled out over 4 years as enrollment and faculty resources allow.

1. CS 2800 Introduction to AI Applications (3 credits)

Prereq: (CS 1121 and CS1122) or CS 1131 or DATA 1200

The course provides an introduction to students about AI and modern AI tools. The course will also introduce different machine learning models, how models are trained and used, with students able to use pre-trained models.

2. **CS3xxx/SAT3xxxx Introduction to Cloud Computing (3 credits)**

Prereq: (CS 1121 and CS1122) or CS 1131

This course introduces the fundamental concepts and technologies of cloud computing. Topics include cloud service models (IaaS, PaaS, SaaS), virtualization, containerization, distributed storage, resource management, and scalability. Students gain hands-on experience deploying and managing applications on public and private cloud platforms such as Amazon Web Services (AWS) and Microsoft Azure, with attention to performance, cost, and security considerations.

3. **CS 4991 - Capstone Project (3 credits)**

A capstone project course. Students will use AI methods and tools to analyze and report out on real-world projects.

The remaining are all electives that will be rolled out given time and faculty resources.

4. **CS4XXX Software Engineering with Generative AI: From AI-Assisted Coding to AI Engineering (3 credits)**

Prereq: CS 4841, CS 3712

This course covers *AI for Software Engineering (AI4SE)* and *Software Engineering for AI (SE4AI)*. Topics include large language models for code generation and software engineering tasks (AI4SE), as well as how to build, deploy, assure, and maintain software products with machine-learned models (SE4AI). The course also addresses principles of responsible AI, including safety, security, fairness, and explainability.

5. **CS4XXX Parallel Computing (3 credits)**

Prereq: CS 3331, CS 3311, CS 4321

This course is a comprehensive exploration of parallel programming paradigms, examining core concepts, focusing on a subset of widely available contemporary parallel programming models, and providing context with a small set of parallel algorithms. Students will perform four programming projects to express algorithms using selected parallel programming models and measure their performance on the CPU and GPU HPC clusters at Michigan Tech. We will compare and contrast parallel programming for GPUs and conventional multi-core microprocessors. The final project will consist of teams of 2-3 students who will implement codes by combining multiple programming models.

6. **CS4XXX Computer Vision (3 credits)**

Prereq: CS 4321, CS 4841, CS 3421

This course explores modern computer vision techniques driven by artificial intelligence and deep learning. Topics include convolutional neural networks, image classification, object detection, segmentation, and generative vision models. Students learn to design,

train, and evaluate vision models using contemporary frameworks and datasets, and apply them to real-world visual recognition and analysis tasks.

7. CS4XXX Natural Language Processing (3 credits)

Prereq: CS 4321, CS 4841

This course introduces computational techniques for processing and understanding human language. Topics include text representation, language modeling, word embeddings, sequence modeling with recurrent and transformer architectures, and large language models. Students apply modern deep learning frameworks to build NLP systems for tasks such as text classification, sentiment analysis, and question answering.

7. CS4XXX Special Topics in AI (3 credits)

Prereq: Senior status

This course will cover current topics and trends in AI. The courses will require reading and discussing current papers along with invited talks from industry and practitioners.

Faculty Qualifications

The Department of Computer Science has 21 tenured/tenure-track faculty members. All but one have a terminal degree in computer science or a closely related field. In addition, 5 of 6 instructional track faculty members hold a terminal degree in computer science or a closely related field. All CS and DS existing courses are being taught by the CS faculty. The proposed new courses will be developed by the faculty members with domain expertise.

Program-specific policies, regulations, and rules

The program follows the university policies and there are no specific policies, regulations and rules.

Resources Needed

Library and other learning resources

No additional library or learning resources are needed initially. The CS Department will add a graduate learning center coach when the freshman enrollment reaches 20.

Suitability of existing space, facilities, and equipment

Initially, the CS Department and the College of Computing plan to utilize the existing Rekhi labs, AC virtual cluster, and/or cloud resources to meet the needs of AI/ML courses. The CS Department and the College of Computing will work with the University to secure necessary

computing resources to support the growth of the program. With the enrollment growth, we expect the growing trend for in-house computing support, specifically a GPU cluster.

Program Costs

The Department of Computer Science can absorb the initial teaching needs of the program. Depending on enrollment, additional teaching and advising capacity may be needed.

Criteria for Financial Evaluation Proposed Academic Programs

Relation to University Strategic Plan

The proposed BS in Artificial Intelligence degree supports the University's Strategic Plan,¹ aligning with the Educational Goals, *"Provide a distinctive and rigorous action-based learning experience grounded in science, engineering, technology, business, sustainability, and an understanding of the social and cultural contexts of our contemporary world."* The proposed degree meets the following itemized goals:

- *"Provide research, service-learning, project-based, entrepreneurial, and international opportunities for students"* The proposed courses are designed around project-based experiences for students.
- *"Promote mutual appreciation of, and collaborative opportunities across, academic disciplines"* The degree program is designed to support students to apply their knowledge in AI to different domain areas.
- *"Continually assess, review, and improve programs and develop new offerings in emerging disciplinary and interdisciplinary areas"* The BS in Artificial Intelligence is placed to meet the needs of the State, country and world to have a workforce trained in the knowledge of artificial intelligence.
- *"Foster mutual respect in personal and professional interactions"* In their classes, students will learn to work in teams. Additionally, they may be partners with people from different backgrounds and perspectives, thus learning teamwork, collaboration, and professionalism.
- *"Promote social and civic responsibility as well as ethical conduct."* The development and use of modern AI tools and techniques requires many lessons in ethics and responsibility. These concepts will be embedded in multiple courses throughout the degree program as well as a required course on ethics.

The University has started discussions on Tech Forward 2.0 including four Themes/Initiatives:

- Critical Resources for the Future
- Advanced Technologies for National Security
- Smart Infrastructure and Communities

¹ Michigan Tech Strategic Plan: <https://www.mtu.edu/stratplan/>

- Health and Well-Being

AI's application is critical for all the themes. In addition, Tech Forward 2.0 adds four Threads/Pillars for all of which AI is a core foundation:

- The Digital World
- Innovation and Entrepreneurship
- Rural Communities and Development
- Education and Workforce Development

Impact on University Enrollment

- **Projected number of students in the program:**

Initial enrollment projects for the program are for 10 students the first year, and 20, 40, and 75 students over the following years. A goal of steady-state enrollment of ~150 students is then achievable. The growth in AI programs across the country supports these estimates and indicates they could be exceeded.

- **Source of new students:**

We hope to interest new students coming to Michigan Tech, who would not otherwise enroll. We do expect the first few years of the program to potentially draw students away from the Computer Science or Data Science programs.

- **What is the likely correlation between demand for the new program and existing enrollment patterns at MTU?**

The College of Computing had seen increasing enrollments across the board until AY25-AY26 when the enrollment went down due to multiple factors. The increase in AI jobs and decrease in the entry-level computing jobs played a significant role. While the tech industry is currently seeing layoffs, demand for AI is in the upward trend with positions available across industries (e.g., automotive, manufacturing, finance, healthcare, etc.). The AI program will attract the students who are interested in computing but are concerned about their job prospects. The new program will likely help stabilize the enrollment in the College in the short term and contribute to further growth in the long term.

- **What is the current enrollment in the unit?**

Recent enrollment within the Department of Computer Science is shown below.

Year	BS in CS	BS in SE	BS in DS	BS in Cybersecurity*
Fall 2025	387	120	30	145
Fall 2024	461	130	19	137
Fall 2023	463	134	8	121
Fall 2022	436	117	n.a.**	112

*BS in Cybersecurity is shared with the Applied Computing Department

** BS in DS was launched in Fall 2023

Impact on Resources in Home Department

- **Faculty lines:** The Department of Computer Science can absorb the initial teaching needs of the program.
- **Faculty and student labs:** The current faculty offices and labs at Rekhi Hall have reached close to the capacity.
- **Advising:** The current data science advisor can cover the new BS in AI program initially. The College will distribute the load among its current advisors.
- **Assessment:** Many of the core AI courses are already where assessment occurs for majors in computer science, software engineering, data science and/or mathematics. Additional time will be needed to enable assessment in the new AI courses as well as coordination for assessment across focus areas.

Impact on Resources in Other Units Within the University

- **Other academic units with regards to faculty, labs and assessment**
We are under the process of creating a new Department of Data Science. If it is approved, the new department will be launched in Fall 2026. The BS in AI program will be shared by the Department of Computer Science and the Department of Data Science. A major of faculty of the new Data Science Department will come from the Computer Science Department. The two department chairs will coordinate teaching and assessment.

Mathematical Science will also be greatly impacted by the new degree program. Therefore, if enrollment meets projections, the Math Department might request additional teaching support. In terms of assessment, the majority of the math courses required in the curriculum are also required by students majoring in math. Some additional time will be required to collect and share assessments across units.

- **Information Technology, the Library, central administration, and career planning**
No additional Library and central administration resources are requested.

Assessment of the ability to obtain necessary resources assuming requested funds are obtained

Past Proposal Outcomes

Describe the extent to which the new program has met the original goals

The proposing unit has initiated the following new degree programs in the last five years.

- BS in Data Science
- MS in Applied Computer Science

The BS in Data Science started in Fall 2023. The initial enrollment was mostly from internal transfers. In Fall 2025, the enrollment has reached 30. The growth has been slower than expected due to recent job market changes. However, we still expect sustained growth in the program. The MS in Applied Computer Science currently has one student enrolled. The Department will put more effort into advertising the program.

How have degree programs added in the past five years affected total enrollment in the department?

The BS in Data Science program, launched in 2023, has reached an enrollment of 30 students in Fall 2025. The BS in Cybersecurity program, which started in 2019, now enrolls 145 students in Fall 2025. We expect the BS in Artificial Intelligence to follow a similar growth trajectory as these programs. In contrast, enrollment in the BS in Software Engineering has remained stable over the past five years, while the BS in Computer Science has experienced a significant decline in Fall 2025—a trend consistent with the nationwide downturn in CS enrollment over the past two years. However, when the BS in Cybersecurity program is included, our total undergraduate enrollment still shows growth in Fall 2025 compared to Fall 2022. These newer programs have helped offset the national decline, and we anticipate that the BS in AI will play a similar stabilizing and growth-supporting role in the coming years, especially when the nationwide uncertainty for the CS programs remains.

Departmental Budget Contributions

- **What is the department's total general fund budget?**

The computer science department's general fund budget for the academic year 2024-25 was \$4,475,727. Note, this does not include lab fee revenues and learning center allocations.

- **How much tuition does the department generate?**

For academic year 2024-25 (fall 2024, spring 2025, and summer 2025), the number of undergraduate student credit hours (SCH) taught by Computer Science faculty was 13,278. \$14,183,229 of tuition was generated by the computer science faculty.

For the same period, the 847 students in the computer science department enrolled in 9,841 SCHs. \$9,479,559 of tuition was generated by computer science students.

How do the benefits from this program compare to other alternatives that are currently under consideration or development?

The Department of Computer Science is considering adding an AI minor. However, a minor cannot be a substitute for an AI degree, considering the surging demands in AI and its applications.