

SDSU

San Diego State University

Academic Applications of AI: Using Student Survey Data to Develop a Data-Informed Strategy

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INTRODUCTION

The proliferation of generative AI technologies has transformed higher education, prompting critical questions about how students perceive and use these tools. To address these questions, we conducted a comprehensive survey at San Diego State University in fall 2023, involving 7,811 student participants, which was expanded in fall 2024 with 12,166 students, faculty, and staff.

Results from the survey were used to develop the Academic Applications of AI (AAAI) microcredential to equip students, faculty, and staff with the practical, ethical, and interdisciplinary know-how necessary to leverage AI technologies across various academic domains. In addition to providing AI training, we are also prioritizing equitable access to AI resources through developing the AztecGPT platform and establishing the Equitable AI Alliance (EAIA).

SDSU AI FELLOWS

AI Academic Fellows are comprised of a vibrant community of faculty and students dedicated to researching AI in higher education. They engage with cutting-edge studies and thoughtfully consider the effect of AI on teaching, learning, and research at SDSU.



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SHARED GOVERNANCE & COLLABORATION

The Information Technology Division and the Office of the CIO collaborated with AI Faculty and Student Fellows to embrace a shared governance approach when designing both the AI student survey and the Academic Applications of AI (AAAI) microcredential program, as outlined below.



Associated Students
Collaboration with student leaders across the campus



Center for Teaching & Learning
Co-facilitation of discussions and training for faculty

SDSU Senate
Engagement with faculty and students via SDSU Senate

CSU Senate
CSU system-wide senate resolution and engagement

Library & Digital Humanities
Collaboration w/ information curation specialists



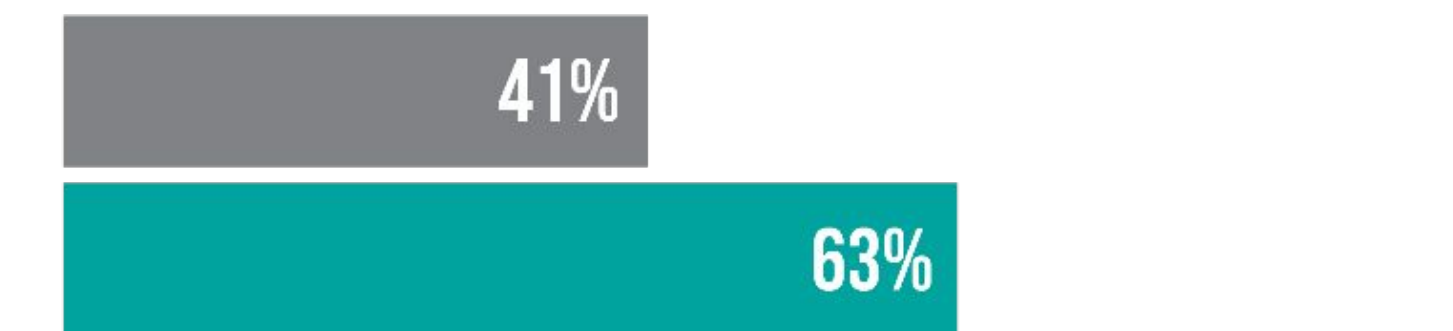
SDSU AI SURVEY

The results of the survey highlight key gaps in AI integration across disciplines; however, comparisons between 2023 and 2024 data indicate that the SDSU campus community is making progress towards closing those gaps.

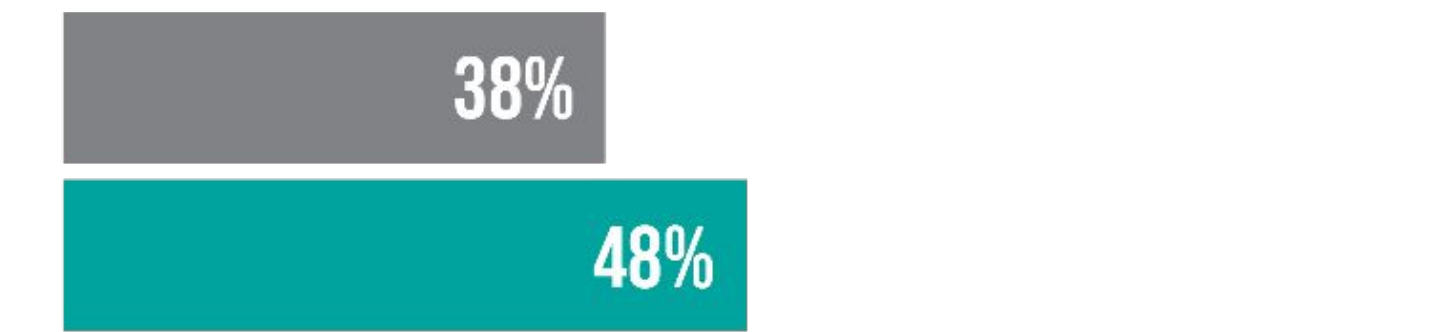
ChatGPT usage (Difference: +37%)



Grammarly usage (Difference: +22%)



Students using AI in their studies (Difference: +10%)

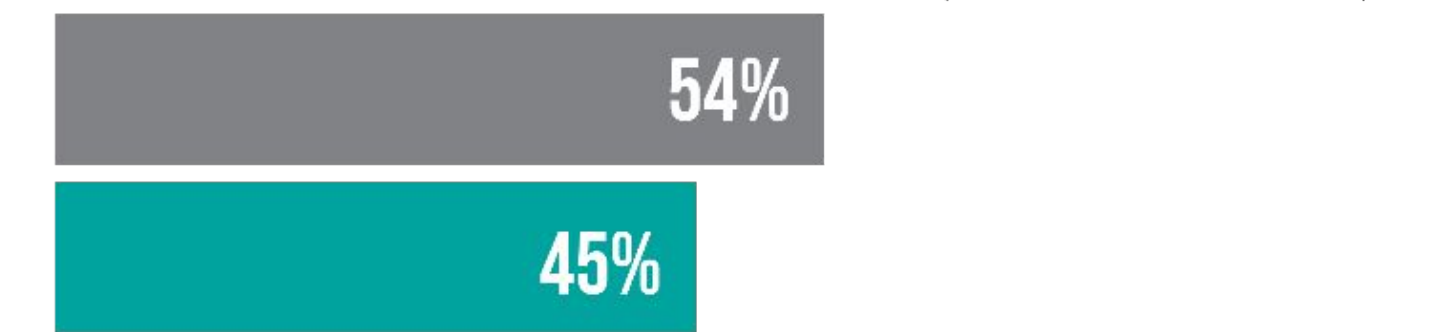


Students stating that AI has positively affected their learning experience at SDSU (Difference: +12%)



2023 vs 2024

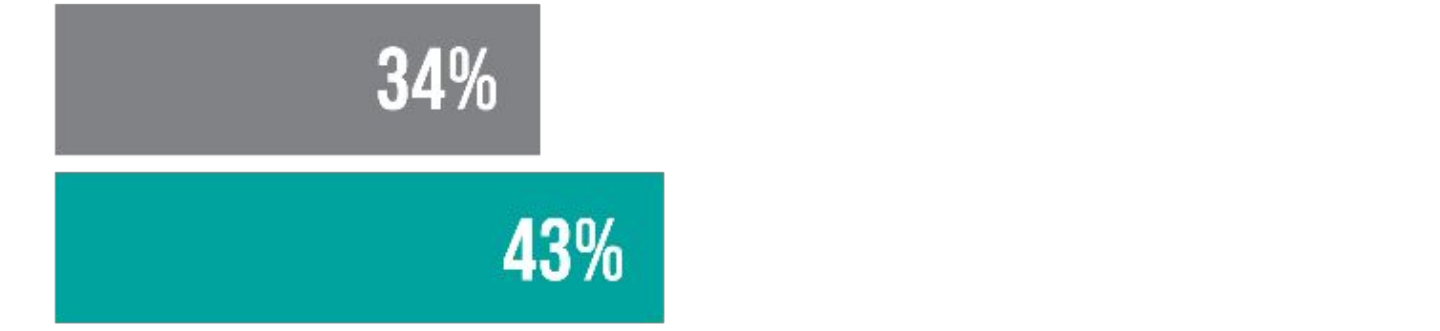
Students stating that their curriculum lacks adequate exposure to AI (Difference: -9%)



Students stating that their professors encourage the use of AI in coursework (Difference: +7%)



Students stating that they have seen opportunities to learn more about AI around campus (Difference: +9%)



2023 Results

21%

Student response rate (n = 7,811)

2024 Results

26%

Campus-wide response rate including students (n = 10,162), faculty, and staff (total n = 12,166)

71%

Students stating that AI will become an essential part of most professions

Keeping current requires support

Protected Time

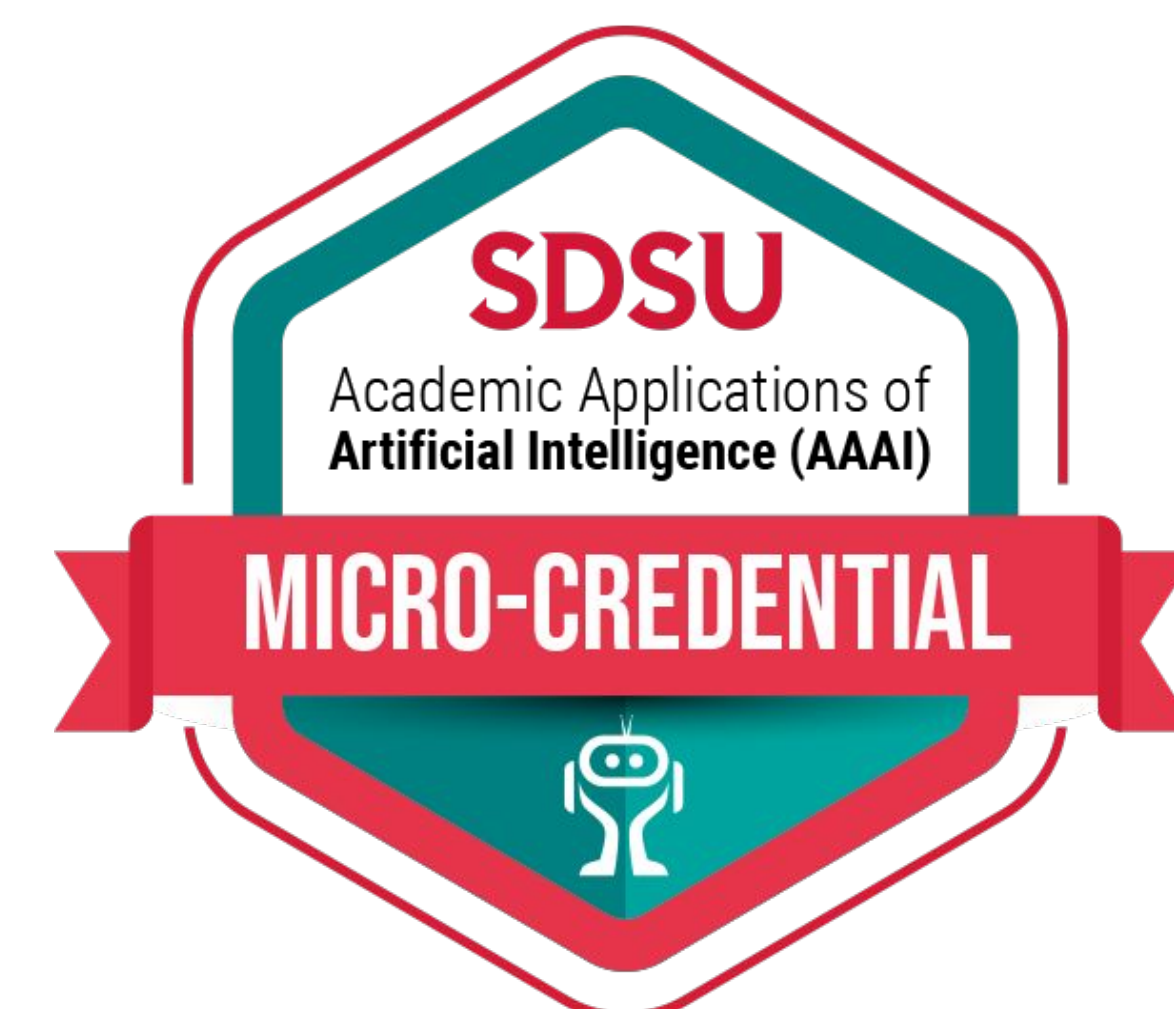
- “My main concern is that we need to completely overhaul the way we teach ... This will take a lot of time [...which] means working evenings/weekends and missing sleep. I will do it, though, because it is ... our job.”

Training (“Training, training, training.”)

- “Training so far from IT and CTL is helping a lot. *Please keep these programs and add more.*”
- “I would love to have continued resources available to ... help us better apply use of AI.”
- “More funding to provide AI tools and training.”

ACADEMIC APPLICATIONS OF AI (AAAI) MICRO-CREDENTIAL

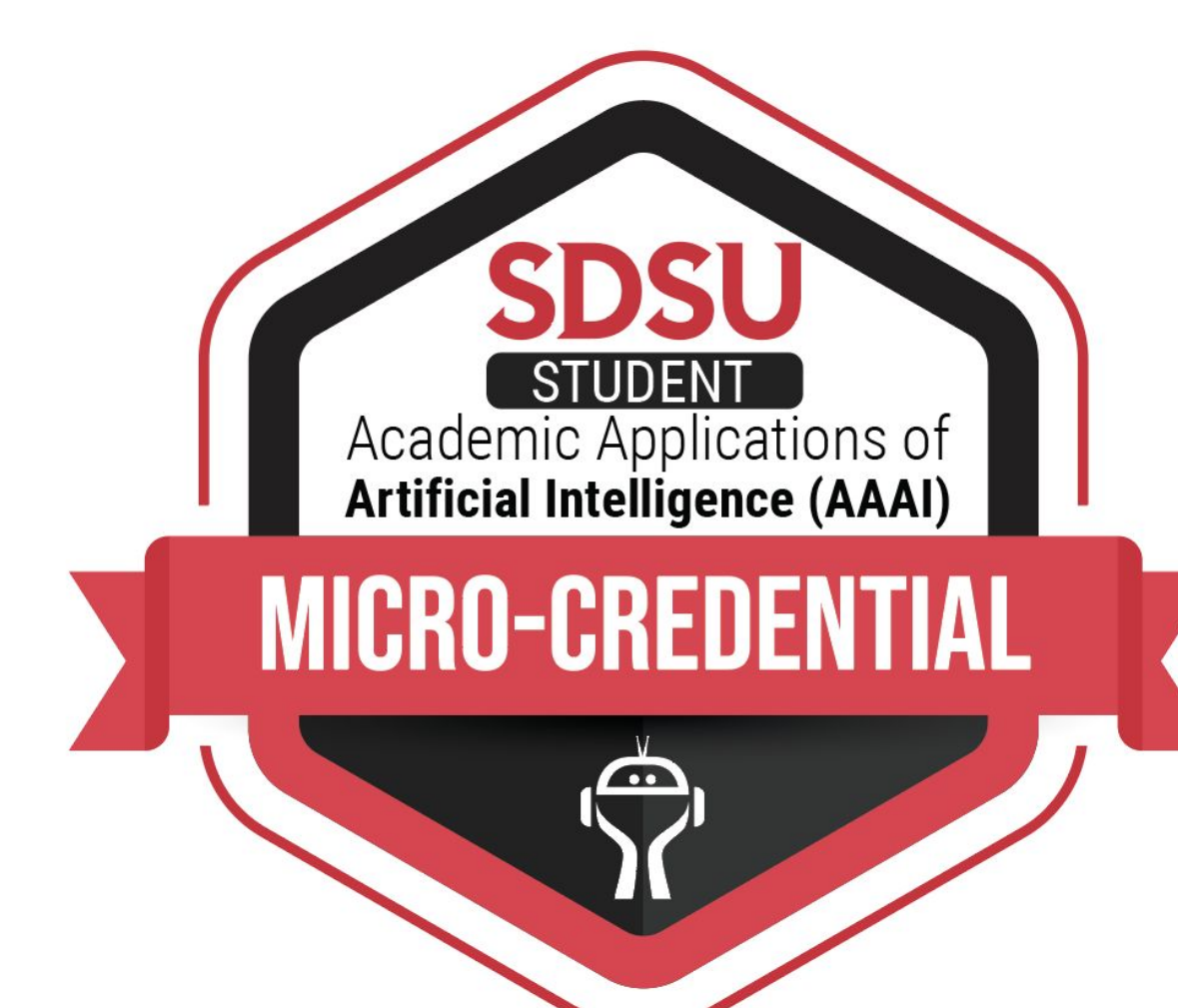
SDSU's Academic Applications of AI (AAAI) Micro-Credential prepares students, faculty, and staff to apply generative AI (GenAI) technology efficiently, effectively, and ethically to level up teaching, learning, and research across disciplines at San Diego State University.



Audit (2 hour) and badge (4 hour) versions

- 5 'modules' averaging 25-50 minutes each
 - Overview: How Does AI Work?
 - Ethics and Responsible Use
 - What Can AI Do?
 - Finding Apps
 - Prompt Engineering Activities
- Read-view-do format
- Activities required for badge (e.g., quizzes and prompt creation)

Available for Students, Faculty, and Staff



AZTECGPT ASSISTANTS

✓ SDSU Assistant	Provides an assistant aware of SDSU policies, process, and help documentation, providing direct answers to your questions. Also ideal for generating new content and brainstorming ideas with SDSU context.
✓ Job Description Helper	Streamlines job description creation for hiring managers using position descriptions. Engages the manager in a dialogue to capture job requirements, then crafts compliant and tailored job descriptions, reducing drafting time and effort.
✓ General AI Assistant	A general AI assistant that can be used for tasks like document summarization, idea generation, and content creation (e.g., emails, reports).
✓ HR Department Assistant	Focused on HR policies, procedures and tasks. The HR Department Assistant will focus on department specific data and tasks and serve as the basis for future department assistants.
✓ Teaching and Learning	Two assistants focused on supporting instructional activities assisting faculty with the creation of instructional materials and assessments, with integration into Canvas, SDSU's learning management system. This assistant will also assist students, helping them understand course material and think critically, serving as a virtual tutor.

JOIN THE EQUITABLE AI ALLIANCE (EAIA)



Equitable AI Alliance
Colleges must adapt to fast-changing AI, ensuring fair access. The Equitable AI Alliance (EAIA) is dedicated to advancing affordable and accessible artificial intelligence (AI) in higher education.



tinyurl.com/aialliance

REFERENCES



aaii.sdsu.edu

