

CERT AI

Certificate in the Foundations and Practice of Artificial Intelligence

Under Review | Fall 2027

Proposal Information

Workflow Status

In Progress

Refresh  **Form Submission, Proposer**

collapse ▼

Submitted for Approval | Proposer

✓ Trilce Estrada | 10/20/2025 3:11 PM

Department Chair Approval, Computer Science

Approved | Department Chair

✓ Shuang Luan | 10/21/2025 10:56 AM

— Lydia Tapia

Main campus pre-proposal approval

Approved

✓ Pamela Cheek | 11/10/2025 5:50 PM

Notice to HSC

Notification Sent

✉ Shelly McLaughlin

Notification, Proposer

Notification Sent | Proposer

✉ Trilce Estrada

Proposer, Proposer

Approved | Proposer

✓ Trilce Estrada | 11/13/2025 4:55 PM

Registrar Technical Check Approval

Sent Back

← Michael Raine

Hi Trilce. Sending back so you can revise the proposal.

11/17/2025 1:32 PM

Form Submission, Proposer

Submitted for Approval | Proposer

✓ Trilce Estrada

Thank you Michael, I fixed the curriculum for this certificate, it shows 12 credits hours and also fixed the full proposal and hed form to be consistent. Thank you for all your help

11/17/2025 4:49 PM

Department Chair Approval, Computer Science

Approved | Department Chair

✓ Shuang Luan | 11/17/2025 7:28 PM

— Lydia Tapia

Main campus pre-proposal approval

Approved

✓ Pamela Cheek | 12/09/2025 1:55 PM

Notice to HSC

Notification Sent

☑ Shelly McLaughlin

Notification, Proposer

Notification Sent | Proposer

☑ Trilce Estrada

Proposer, Proposer

Approved | Proposer

✓ Trilce Estrada | 12/09/2025 6:33 PM

Registrar Technical Check Approval, Registrar Technical Check

Approved | Registrar Technical Check

— Michael Raine

✓ Maggie Sumruld | 12/11/2025 9:55 AM

College/School Approval, School of Engineering

Approved | College or School approver

✓ Shuang Luan | 1/06/2026 2:45 PM

Library Approval, Main Campus Library

Approved | Library Approval

— Sever Bordeianu

✓ Caitlin Wells | 1/09/2026 11:43 AM

FSCC Member notification, Faculty Senate Curriculum Committee

Notification Sent | Faculty Senate Curriculum Committee Member

☑ Joe Anderson

☑ Laura Belmonte

☑ Sara Ice

☑ Mary Rice

☑ John Russell

☑ SueNoell Stone

☑ Jonathan Wheeler

☑ Kirsten Thomson

☑ Paulo Dutra

☑ Randi Archuleta

☑ Joan Lucas

☑ Julia So

☑ Jennifer Henry

☑ Christopher Holden

☑ Justine Ponce

☑ Isabella Goss

☑ Vanessa Ferguson

☑ Lauren McQuiston

☑ Jennifer Laws

Faculty Senate Curriculum Committee Approval

Sent Back

← Janet Vassilev

The requested changes have not been made by the deadline.

4/21/2026 3:10 PM

Form Submission, Proposer

Submitted for Approval | Proposer

✓ Trilce Estrada

Updated forms without CS422

4/21/2026 6:09 PM

Department Chair Approval, Computer Science

Approved | Department Chair

✓ Shuang Luan | 4/21/2026 6:20 PM

— Lydia Tapia

Main campus pre-proposal approval

Approved

✓ Pamela Cheek | 4/27/2026 1:10 PM

Notice to HSC

Notification Sent

☑ Shelly McLaughlin

Notification, Proposer

Notification Sent | Proposer

☑ Trilce Estrada

Proposer, Proposer

Approved | Proposer

✓ Trilce Estrada | 4/27/2026 2:58 PM

Registrar Technical Check Approval

Sent Back

← Michael Raine

Good morning. This proposal has numerous issues, and the response to last request from the FSCC was not in time for this curriculum cycle. Please resubmit in August for the 27/28 curriculum and catalog cycle.

5/06/2026 10:01 AM

Department Chair Approval, Computer Science

Approved | Department Chair

✓ Shuang Luan | 5/13/2026 12:23 PM

— Lydia Tapia

Main campus pre-proposal approval

Approved

✓ Pamela Cheek | 5/13/2026 3:23 PM

Notice to HSC

Notification Sent

☑ Shelly McLaughlin

Notification, Proposer

Notification Sent | Proposer

☑ Trilce Estrada

Proposer, Proposer

Approved | Proposer

✓ Trilce Estrada | 8/24/2026 2:25 PM

Registrar Technical Check Approval, Registrar Technical Check

Approved | Registrar Technical Check

- Michael Raine
- ✓ Maggie Sumruld | 8/24/2026 2:53 PM

College/School Approval, School of Engineering

Approved | College or School approver

- ✓ Darryl Dickerson

I want to again affirm the support from the School of Engineering for adding the proposed certificate.

8/27/2026 3:11 PM

Library Approval, Main Campus Library

Approved | Library Approval

- ✓ Caitlin Wells | 8/28/2026 4:34 PM
- Laura Kohl

FSCC Member notification, Faculty Senate Curriculum Committee

Notification Sent | Faculty Senate Curriculum Committee Member

- ☒ Joe Anderson
- ☒ Laura Belmonte
- ☒ Sara Ice
- ☒ Mary Rice
- ☒ John Russell
- ☒ SueNoell Stone
- ☒ Jonathan Wheeler
- ☒ Kirsten Thomson
- ☒ Paulo Dutra
- ☒ Randi Archuleta
- ☒ Joan Lucas
- ☒ Julia So
- ☒ Jennifer Henry
- ☒ Christopher Holden
- ☒ Justine Ponce
- ☒ Isabella Goss
- ☒ Vanessa Ferguson
- ☒ Lauren McQuiston
- ☒ Jennifer Laws

Faculty Senate Curriculum Committee Approval, Faculty Senate Curriculum Committee

Approved | Faculty Senate Curriculum Committee Chair

- ✓ Janet Vassilev

Approved per FSCC vote in April 2026.

9/11/2026 11:48 AM

- Nicole Capehart

Provost Approval, Main Campus Provost

Approved | Provost

- ✓ Pamela Cheek | 10/02/2026 11:59 AM

Faculty Senate Approval, Faculty Senate

Waiting for Approval | Faculty Senate Approval

Nancy Middlebrook
Theresa Sherman

HLC Notification

Notification

Joseph Suilmann

Student Success, Teaching and Research (SSTAR) Approval, Student Success, Teaching and Research Committee
Approval | SSTAR approval

Pamela Kirchner

Hannah Long

Board of Regents Approval, Board of Regents
Approval | Board of Regents Approval

Emily Morelli

External Review - HED program approval, External Review
Approval | HED program approval

Michael Raine

Maggie Sumruld

External Review - HED CIP code approval, External Review
Approval | HED CIP code approval

Michael Raine

Maggie Sumruld

Reg. Final Approval/Processing, Registrar
Approval | Registrar final approval

Michael Raine

Maggie Sumruld

Notification, Proposer
Notification | Proposer

Trilce Estrada

Notification, Faculty Senate Graduate and Professional Committee
Notification | Chair

Robben Brown

Office of Institutional Analytics Notification, Office of Institutional Analytics
Notification | Notification User

Office of Institutional Analytics

Admissions, Admissions Notifications
Notification | Admissions Staff

Deborah Vigil Kieltyka

Chris Beardemphl

Amanda Opeka

New Program Notification, Office of Assessment
Notification | Office of Assessment notification

Julie Sanchez

Elizabeth Kerl

Ean Henninger

Amanda DiMercurio

EMRT notification, EMRT users
Notification | EMRT user

Enrollment Mgt Reporting Team

Notification, LoboTrax Team

Notification | LoboTrax Staff

Sherri DeLeve
Paula Freitag
Hannah Epstein
Allie Martinez
Glenda Johnson

Proposal Information

Sponsoring faculty/staff member

Trilce Estrada-Piedra

Sponsoring faculty/staff email

trilce@unm.edu

College

School of Engineering

Department

Computer Science

Campus

Main Campus

Effective Term and Year

Proposed Effective Term and Year

Fall 2027

Justification

Program Justification

The demand for an AI-skilled workforce in New Mexico and nationally outpaces the current supply of graduates with applied AI skills. National laboratories, technology companies, and regional industries require employees who can deploy machine learning models and integrate AI techniques into production environments. However, most undergraduate curricula focus on broad computer science fundamentals without providing a targeted credential that demonstrates competency in AI practice. This certificate fills that need by structuring a curriculum around core AI competencies, including supervised and unsupervised machine learning, large scale data management for AI, digital image processing/computer vision, and adaptive intelligent systems. By offering a transcripted credential, the program provides undergraduates with a competitive edge in the job market.

Currently, there are no other programs (degrees, certificates) or concentrations at the undergraduate level with a focus on Artificial Intelligence, as such, there is no duplication.

Program Category and Level

Program Category Certificate	Program Level Undergraduate	Degree, Minor, or Certificate Name Certificate in the Foundations and Practice of Artificial Intelligence
Certificate or Degree Type Certificate (undergraduate)		
Degree/Certificate Level Undergraduate Certificate	Proposed CIP Code ⓘ 11.0102	Proposed CIP Title ⓘ Artificial Intelligence and Robotics
Is this program also offered online? No		

New program courses

Composition of new program			
Existing courses	Revised courses	New Courses	Total Credits
12			12

New Degrees/Certificates Only

Pre-proposal Executive Summary ⓘ ug_certificate.pdf	
Program Duplication As of Fall 2025, no undergraduate programs (B.S., B.A., or certificates) or program concentrations at UNM main-campus focus specifically on Artificial Intelligence. Therefore, this certificate represents a unique offering at the undergraduate level, with no duplication within the institution. UNM Valencia campus is proposing a new undergraduate certificate in Artificial Intelligence and Data Science (AI/DS). Our proposed certificate and the UNM–Valencia proposed Certificate in AI/DS share a general goal of expanding AI literacy and workforce readiness in New Mexico, but they differ in depth and target audience. The Valencia AI/DS certificate is a 24-credit program that combines artificial intelligence with data science fundamentals, preparing	Correspondence

community college and lower division students for entry level technical employment or transfer into four year programs. Its emphasis is on introductory computational literacy, Python programming, and applied data analysis. In contrast, the UNM Main-campus certificate is an upper-division (400-level and above), four course (12-credit) program designed for junior and senior students, primarily within Computer Science and related fields, who seek focused, advanced preparation in modern AI methods and applications without extending time-to-degree. The proposed UNM–Main undergraduate certificate does not duplicate the proposed UNM–Valencia AI/DS certificate. The two programs are complementary and can be aligned in the future to establish a coherent pipeline

Pre-proposal Approved?

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Associate Provost Memo

- UG and GRAD CERT Foundations of AI.pdf

Proposal File Upload

- CS_AI_undergrad_full.pdf

HED Submission Documents

- hed-undergrad-form.pdf

File Uploads

Document uploads

- memo_certAI_undergrad.pdf
- b_formal_need_undergrad.pdf
- c_similar_programs_undergrad.pdf
- d_list_employees.pdf
- a_ai_jobs_barometer_2024.pdf

Associated Quali Forms

Select any associated course forms that exist

Select any associated program forms that exist

Catalog Information

Program Description

This four-course undergraduate Certificate in the Foundations and Practice of Artificial Intelligence is designed to prepare students with the practical and theoretical knowledge needed to enter the rapidly expanding AI workforce. Its coursework emphasizes the application of AI methods to real-world problems. By combining foundational coursework with practice-oriented topics, the program provides students with the conceptual understanding and applied skills demanded by employers in tech sectors. Graduates will be able to design, implement and critically evaluate AI systems, making them competitive for internships and employment.

Admissions Requirements

Applicants must be enrolled students at the University of New Mexico with junior standing (completion of at least 60 credit hours) and hold a minimum GPA of 3.0. Prerequisites for admittance into the AI certificate are:

- A course in computer programming or equivalent experience using a programming language generally used for Artificial Intelligence and/or data science such as Python, C, C++, or Java.

Graduation Requirements

To earn the Certificate in the Foundations and Practice of Artificial Intelligence, students must complete a minimum of 12 credit hours from the approved curriculum. Only courses completed with a grade of "C" or higher may count toward the certificate.

Professional Credential/Licensure Program Information

License/Certification associated with program

No

Concentrations

Program Concentrations

Code	Title
Concentration Required	
No	

Certificate Information

Certificate Requirements

- Complete all of the following
 - Complete at least 2 of the following:
 - CS427 - Principles of Artificially Intelligent Machines (3)
 - CS423 - Introduction to Complex Adaptive Systems (3)
 - CS429 - Introduction to Machine Learning (3)
 - CS464 - Introduction to Database Management (3)
 - CS467 - Principles and Applications of Big Data (3)
 - Earn at least 6 credits from the following types of courses:
In consultation with an advisor, students may select from a list of pre-approved Computer Science courses.
Current approved offerings include Advanced Machine Learning, Neural Networks, and Reinforcement Learning.
Additional approved courses will be posted on the certificate website as they are added to the curriculum.

Grand Total Credits: 12

Registrar Office Only

CM Program Code	BANP	Banner Program Code	Major Code
CERT AI			
Online Program Code	Online Major Code	Pre-major Program Code	Pre-major Major Code
CIP Code	Concentration Inheritance		
11.0102	--		
Catalog	Catalog Activation Date		

Registrar Notes Only