FOUNDATIONAL ARTIFICIAL INTELLIGENCE

CERTIFICATE – 9 CREDITS

About this program

The main goal of this certificate program is to equip participants with the leadership skills and frameworks necessary to lead change in an AI-driven environment. From understanding responsible AI concepts to utilizing AI for strategic decision-making and process optimization, participants gain beneficial insights and develop data-informed approaches to promote innovation and integrate AI into organizational strategies and leadership practices.

Program outcomes

1. Build a strong AI foundation.
2. Promote data literacy and analysis.
3. Develop applied technical skills.
4. Explore specialized AI domains.
5. Encourage innovation and problem-solving.
6. Embed ethical awareness and responsibility.
7. Prepare for the workforce and further study.
8. Integrate learning through a capstone.

Curriculum overview

Crds	Requirement type
9	Required courses
9	**Total**

Developmental courses note: A student may be required to enroll in developmental courses in reading, writing and math. A student's scores on the Accuplacer assessment will determine enrollment in developmental courses. The purpose of developmental courses is to prepare students for the demands of a college-level curriculum. *Credits may vary.*

Accreditation: Minnesota State Community and Technical College is accredited by the Higher Learning Commission, a regional accreditation agency recognized by the U.S. Department of Education. The Higher Learning Commission 230 South LaSalle Street, Suite 7-500 Chicago, IL 60604-1411 http://www.ncahigherlearningcommission.org Phone: 312.263.0456 / 800.621.7440

Curriculum requirement details

Required courses

Course	Crds
CPTR1011 - Survey of Artificial Intelligence	3
CPTR1015 - Business Applications of Artificial Intelligence	3
CPTR1019 - Introduction to Prompt and Generative Artificial Intelligence	3

Other requirements or restricted electives

Course summaries

CPTR1011 - Survey of Artificial Intelligence ..... ***(3 credits)***
This course provides an introduction to artificial intelligence (AI), machine learning (ML) and deep learning (DL). Students explore foundational concepts, real-world applications and ethical implications of AI technologies. Through hands-on labs using Python, students learn how to prepare data, build simple ML models, evaluate performance and experiment with neural networks, computer vision and natural language processing. The course concludes with a final project in which students develop and present a simple AI application.

CPTR1015 - Business Applications of Artificial Intelligence ..... ***(3 credits)***
Students are introduced to the ways that artificial intelligence (AI) is changing contemporary businesses in this course. Students will investigate AI-powered applications in a range of business domains, including marketing, finance, operations, human resources and decision making. The course prepares students for careers in a technology-driven business environment by emphasizing real-world applications, hands-on tool exploration, ethical considerations and innovation strategies.

CPTR1019 - Introduction to Prompt and Generative Artificial Intelligence ..... ***(3 credits)***
Through a non-technical approach, this course introduces students to the world of generative artificial intelligence and prompting techniques. Students investigate artificial intelligence (AI) tools that produce text, images, audio and video, and they discover how to work with those tools efficiently. Practical applications, ethics and responsible AI use in both personal and professional contexts are the course's focus areas.

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Program Plan — "Fall Start"

Locations: Moorhead

1st Fall Term (3 credits)

Courses

Course	Crds
CPTR1011 - Survey of Artificial Intelligence	3

1st Spring Term (3 credits)

Courses

Course	Crds
CPTR1019 - Introduction to Prompt and Generative Artificial Intelligence	3

2nd Fall Term (3 credits)

Courses

Course	Crds
CPTR1015 - Business Applications of Artificial Intelligence	3