

# THE ARTIFICIAL INTELLIGENCE ECOSYSTEM

CAP320 | ARTIFICIAL INTELLIGENCE BACHELORS OF  
SCIENCE

In The Artificial Intelligence Ecosystem Course students are introduced artificial intelligence (AI) technology including its history and ethical considerations. Additionally, they will learn and develop skills using the command line interface, VS Code and Git.

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This course will introduce students to the field of artificial intelligence including its history and ethical considerations.

## COURSE OUTCOMES

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AI Ecosystems

AI Past and Future

Ethics in AI

Windows Subsystem for Linux

Command Line Git

## COURSE OUTCOMES

## COURSE MATERIALS

- ▶ Laptop
- ▶ Windows Subsystem for Linux
- ▶ VS Code
- ▶ Git and GitHub
- ▶ O'Reilly Books Online

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## SKILLS DEVELOPMENT



### ACADEMICS

The Artificial Intelligence Ecosystem prepares students for future courses in artificial intelligence by introducing the field of AI including its history and ethical considerations. Additionally, it prepares students to work with AI development technology.



### CAREER

The Artificial Intelligence Ecosystem Labs are designed to promote the use of industry-standard AI development tools.

Additionally, they allow students to think deeply about the future of AI including issues of responsibility and worker displacement.



### PORTFOLIO

The Artificial Intelligence Ecosystem prepares students for success in the Advanced Artificial Intelligence course, which presents a variety of techniques used for devising and leveraging algorithms and approaches to create intelligent agents to achieve specified goals.

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## WEEKLY BREAKDOWN

### WEEK ONE

This week students are introduced to different types of AI in use today and the ethical issues that they may encounter during their careers.

### WEEK THREE

Students continue learning about the development of AI from the AI Winter in the 1970s and 1980s to the popularization of large language models.

### WEEK TWO

Students learn about the history of AI from AI in mythology and folklore through complex logic-based systems like Deep Blue.

### WEEK FOUR

During the final week, students will learn about best practices for working with retrieval augmented generation.

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## GRADE WEIGHTS

				GRADE WEIGHT
Artificial Intelligence Today (20%)				20%
AI: Logic Systems (25%)				25%
AI: Learning Systems (25%)				25%
Communicating with AI (20%)				20%
GPS (10%)				10%
Week 1	Week 2	Week 3	Week 4	Total
				100%

## OUT-OF-CLASS WORK

This course requires at least 28 hours of preparation and out-of-class work. Out-of-class activities are documented in this syllabus and include reading assignments, outside research, project development, skills practice, and homework. Consideration has been given to creating out-of-class work that will support students' efforts to successfully complete this course while achieving course objectives and program learning outcomes.

