ARTIFICIAL INTELLIGENCE METHODS AND APPLICATIONS, B.S. (INFORMATION SCIENCES AND TECHNOLOGY)

Begin Campus: Any Penn State Campus

End Campus: University Park

Program Learning Objectives

- **Knowledge:** Graduates will be able to demonstrate disciplinary knowledge, including the principles, key concepts, and skills required to design, implement, and deploy AI systems that utilize knowledge representation, reasoning, machine learning, and programming to address complex real-world applications.
- **Problem-Solving and Evaluation:** Graduates will be able to identify and formulate real-world problems using AI concepts and frameworks and apply their disciplinary knowledge to develop and evaluate AI-based automated solutions or human-AI collaboration strategies.
- **Socially Responsible AI:** Graduates will be able to address societal and ethical concerns in real-world AI applications by designing and deploying safe, secure, and equitable AI systems that enhance productivity and innovation while mitigating risks such as bias, disinformation, privacy violations, and threats to national security.
- **Communication:** Graduates will be able to effectively communicate the design, benefits, risks, and results of AI projects to diverse stakeholders through written, verbal, and visual forms.
- **Teamwork:** Graduates will be able to demonstrate effective teamwork to achieve the goals of projects involving artificial intelligence components.