ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (AIM)

AIM100 / Introduction to Artificial Intelligence
3 Credits / 3.0 Periods for Lecture
Basic concepts and applications of artificial intelligence (AI), including AI project cycles. Focus on issues surrounding AI including ethics, bias, culture, regulations, and professional expectations. Prerequisites: None.
Division: Physical Sciences and Engineering

AIM110 / Introduction to Machine Learning
3 Credits / 4.0 Periods for Lecture & Lab
Introduction to machine learning concepts and Python applications, including data acquisition, supervised and unsupervised learning, and data modeling. Prerequisites: A grade of C or better in AIM100, CIS156, and MAT206.
Division: Physical Sciences and Engineering

AIM210 / Natural Language Processing
3 Credits / 4.0 Periods for Lecture & Lab
Fundamental concepts in Natural Language Processing (NLP) and text processing. Focus on knowledge and skills necessary to create a language recognition application. Prerequisites: A grade of C or better in AIM110.
Division: Physical Sciences and Engineering

AIM220 / Artificial Intelligence for Computer Vision
3 Credits / 4.0 Periods for Lecture & Lab
Understand and apply the basic techniques to process images using OpenCV and Python libraries. Prerequisites: A grade of C or better in AIM110.
Division: Physical Sciences and Engineering

AIM230 / Artificial Intelligence for Business Solutions
3 Credits / 4.0 Periods for Lecture & Lab
Fundamentals of artificial intelligence (AI) and machine learning to support business solutions. Prerequisites: A grade of C or better in AIM210 and AIM220.
Division: Physical Sciences and Engineering

AIM240 / Artificial Intelligence Capstone Project
3 Credits / 4.0 Periods for Lecture & Lab
Focus on how a social issue is explored, brought through the Artificial Intelligence (AI) Project cycle, and delivered as a solution using the different domains of AI, including computer vision and natural language processing. Prerequisites: A grade of C or better in AIM210 and AIM220.
Division: Physical Sciences and Engineering