

Applied Artificial Intelligence, MS



Assessment Overview & Results Summary

College/School:	Shiley-Marcos School of Engineering
Measures Used:	The capstone course that includes project report, student video presentations, and the portfolio they prepare in the course demonstrating achieved program objectives and learning outcomes is used.
Process for Interpretation of Evidence:	The program faculty and academic director interpret the evidence.
How Findings are Used:	<ul style="list-style-type: none">✓ Changes to curriculum/pedagogy✓ Changes to assessment methods✓ Changes to student services✓ Increased faculty professional development
Results Summary and Continuous Improvement Actions for AY 2020-2021:	<p>The AAI program was launched in Spring 2021. Students have progressed through two foundation courses in artificial intelligence and statistics in the Spring semester and more advanced courses in machine learning, neural networks, natural language processing, and computer vision in the Summer and fall semesters. The student outcomes were assessed in the two courses over the Spring, summer, and fall semesters. Students were taught to develop and evaluate the concepts of random variables and probability distributions, perform statistical hypothesis testing, perform estimation of population statistics, design algorithms, representations, and techniques used in AI to suit decision-making requirements, conform methods and controls to ethical and moral standards currently under consideration for responsible application of AI technologies, and simulate the range of Deep Learning algorithms, models and its applications.</p> <p>To assess the outcomes, we analyzed student assignments, exams, and group discussions. It was evident students grasped the main concepts and principles. In areas where student missed points, it was due to one of the following factors: Students not understanding the assignment instructions, not practicing enough problems, and not having the required skills and pre requisites in certain areas to succeed. We have modified the student orientation course to include a check list of academic skills in specific areas students must have to succeed in the program. We have modified our course design methodology to include longer and more elaborate videos from the instructor that explain</p>

practice problems, main principles, and assignment instructions more elaborately.