



EGR 113: Introduction to Robotics

This is an introduction to the science of Robotics and is designed for non-engineering and engineering students. Students must understand how scientific innovation can affect their lives either directly or indirectly while researching the history of robotics and the ethical role of robotics in the modern world. Scientific inquiry is applied while building robots and testing design challenges. Students test physical constructs and analyze performance in a systematic and documented process. Physical science and programming are utilized to design and evaluate robots to complete weekly challenges. Three hours of lecture and three hours of laboratory per week. Instructional Support Fee applies. Gen. Ed. Competencies Met: Ethical Dimensions and Scientific Reasoning and Discovery.

Course Student Learning Outcomes

1. Apply scientific knowledge in the designing and testing of various robot challenges. 2. Research the history and applications of robotics to distinguish the various uses, components, and designs of modern robots. 3. Interpret ethical questions on the use of robotics in a modern society and discuss the merits of differing views.

Credits: 4

Program: Engineering