



ADVANCED ELECTRO-MECHANICAL DESIGN

Course Number	EMET 400
Course Name	ADVANCED ELECTRO-MECHANICAL DESIGN
Credit Value (Breakdown of theory and lab credits)	3, 3T+0L
Catalog Course Description	This course is integration of mechanical disciplines, controls, electronics and computers in the design of high-performance machines, devices or processes. Hands-on lab exercises and design projects will provide extensive coverage of mechanical components and assembly, sensors and actuators, electrical drive. <i>Prerequisites:</i> EET 200/L, DRFT 100 and MET 302. (3, 3T+0L)
Student Learning Outcomes/Objectives /Competencies of the Course	<ul style="list-style-type: none"> • Student will learn programming terminology of Electromechanical design • Students will learn programming basics of electronics • Students will learn about sensors and actuators used in electromechanical systems • Students will learn about PID control and implementing it on devices • Students will also learn about rapid prototyping • Students should be able to plan the project from inception to completion • Students will also learn to troubleshoot complex systems
College-Wide Student Learning Outcomes	<ol style="list-style-type: none"> 1. Critical Thought 2. Information Literacy

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