

Course #**GET x683****ETG x683****Title** *Capstone Design Project*

Description *Students from the CET, EET and MET disciplines come together to work effectively as a team to implement the project specifications and design developed in the Capstone Preparation course. Students are expected to apply knowledge from a variety of domains to formulate a plan of attack resulting in the complete solution to design and system problems. Results should culminate in the creation of a working prototype along with a final report and oral presentation by team members. Individual Capstone projects are optional with the approval of the CET, EET, and MET Program Coordinators.*

Outcomes

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>
1. To be able to function effectively in an engineering team consisting of students from the three SET engineering technology disciplines: Electrical, Mechanical and Computer Engineering Technology,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. To be able to maintain and effectively use an engineering journal that documents the chronology and principal source of creative solutions,	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. To be able to effectively use all of the previous engineering technology courses from the student's curriculum to perform the Design Process Methodology as taught in the Capstone Preparation Course which consists of Problem Statement, Concept(s) Generation, feasibility analysis, Preliminary Design, Detail Design, Prototype Fabrication and Testing an the preparation of a detailed Final Report,	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. To be able to prepare and submit timely bi-weekly (twice per month) Progress Reports that detail the status of the Capstone Project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. To be able to effectively communicate with and/or refer to faculty, staff, manufacturer's representatives, professional journals, technical reports or additional textbooks and project sponsors to assist in the solutions to problems associated with professionally and ethically completing the Capstone senior Design Project,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. To be able to orally present the Capstone Project Summary in front of colleagues, faculty and Alumni Judges using Power Point or an equivalent presentation software,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. To be able to prepare a Presentation Poster that details the significant results of the Capstone Project,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>