

## Graduation Project Information

The type of graduation project has to be a capstone design. A capstone design project should be planned to provide a unified effort in developing: teamwork skills, multidisciplinary interaction, communication skills, fundamentals of engineering design processes, and application of engineering design principles to a real engineering project. The main objective is to enable students to experience real life engineering problem solving, design, team work, project execution and management.

Semester	7 <sup>th</sup>	8 <sup>th</sup>
<b>Course Name</b>	<b>ChE 491 Graduation Project I</b>	<b>ChE 492 Graduation Project II</b>
<b>Description</b>	Select the graduation project from list of topics, define objectives and scope of the work, review relevant literature, initiate the project and submit a draft report.	Continuation of ChE 491 with comprehensive work on the selected topic, report writing, and oral presentation.
<b>Credit hours</b>	1	3
<b>Prerequisite</b>	100 credit hours has to be completed	ChE 491 Graduation Project I
<b>Co-requisite</b>	ChE 461 Chemical processes and plant design	
<b>Topics</b>	<ul style="list-style-type: none"> <li>▪ - Problem Statement, Scope, General Info</li> <li>▪ - Literature Review</li> <li>▪ - Preparing Engineering Notebook</li> <li>▪ - Planning and Generating a Progress Report</li> <li>▪ - Design Review</li> <li>▪ - Documenting a Final Report</li> </ul>	<ul style="list-style-type: none"> <li>• - Maintaining Engineering Notebook</li> <li>• - Developing Progress Report</li> <li>• - Analysis, Design and Implementation</li> <li>• - Results and Discussions</li> <li>• - Documenting a Final Report</li> <li>• - Preparing Poster</li> <li>• - Final Work Presentation</li> </ul>
<b>Student Outcomes</b>	<ul style="list-style-type: none"> <li>• - Outline contemporary issues related to the project topic</li> <li>• - Establish material balance for the process</li> <li>• - Choose the best suitable process among different alternatives</li> <li>• - Develop the PFD for the process</li> <li>• - Demonstrate capabilities to write a report</li> </ul>	<ul style="list-style-type: none"> <li>• - Design chemical engineering equipment with the required specifications</li> <li>• - Simulate the process using simulation tool</li> <li>• - Demonstrate capabilities to write a report</li> <li>• - Illustrate their work in a presentation</li> <li>• - Evaluate the economic benefits of the process in team work</li> </ul>
<b>Grading Policy</b> (Applicable from 2019/2020)	<ul style="list-style-type: none"> <li>• - Engineering Notebook 5%</li> <li>• - Peer Evaluation 5%</li> <li>• - Final Report (Supervisor 65% and Examiner 25%)</li> </ul>	<ul style="list-style-type: none"> <li>• - Engineering Notebook 5%</li> <li>• - Peer Evaluation 5%</li> <li>• - Final Report and Oral presentation (Supervisor 45% and Examiner 45%)</li> </ul>
<b>Academic Integrity</b>	Students have the responsibility to read and observe the requirements of the Code (University policy) that prohibits cheating, plagiarism, abuse of academic materials, and complicity in academic dishonesty.	