Master of Engineering Program (MENG)
ENGR 5315 Capstone Project Course Guidelines

The following minimum general guidelines are provided to fulfill the expectations of the MENG Capstone course:

❖ After completing a minimum of 24 credits towards their degree, students should start thinking about the capstone project at least 2 semesters before their final semester and submit a Capstone Proposal Cover Page (see attached) for approval in the semester prior to starting the project. The proposal must be completed prior to registering for the Capstone course.

➢ All MENG students are strongly encouraged to develop capstone projects with faculty individually, by which the students will learn how to develop/formulate business related projects. To this end, a student should contact faculty with whom the student is interested in working with at least one semester ahead of the capstone project semester. If a student is unable to reach an agreement with an instructor but still plans to perform the capstone project, the student needs to discuss with their academic advisor to find an instructor. Once an agreement between student and instructor is reached, the student should summarize the planned project scope/schedule/milestones and submit it to their instructor and academic advisor for approval.

➢ Please note: your Capstone Project title will appear on your official transcript

➢ The Project Proposal is to include: (see attached Capstone Project Template)
   1. Concise description of the project
   2. Need or interest for the project
   3. Technical approach to be taken
   4. Work to be done and detailed description of deliverables
   5. Expected results
   6. Initial planned project schedule

➢ The proposal is evaluated in terms of:
   1. Project
   2. Relevance
   3. Project definition
   4. Project application and its application likelihood
   5. Student’s background and ability to perform the project

❖ The Graduate student is expected to spend the same amount of time for this project course as for any graduate 3-credit course, which is about 9-12 hours per week for 15 weeks.
❖ The subject of the project selected can support the company for which the graduate student is employed, or the student can propose a problem or topic to pursue that is of interest to them.

❖ The project should draw upon and demonstrate the application of material taught in the MENG program.

❖ The Graduate student should be in contact (meet or by telephone) with his/her advisor(s) at least **every two weeks** (or by mutually agreed upon time schedule) during the semester. The Graduate student will **brief** the advisors of his/her progress. Copies of the report or PowerPoint briefings should be sent to the advisors approximately **three days before** the briefing. Dates of the meeting should be written on the Capstone Project Checklist.

❖ At Mid-Term, approximately 7 weeks into the semester, the student’s “Progress Mid-Term Briefing” should provide sufficient results of completed tasks and deliverables, analysis, and testing (as applicable) such that the project can be successfully projected to be completed by the end of the semester.

❖ The **deliverables** of the project are to include:

- A set of Progress Briefings
- A Final Report
- A 45–60 minute oral presentation at the end of the term
- The Final Report and Oral presentation constitute the Final Exam
- Data sets, model, or engineering artifacts detailed in the deliverables section

❖ The outline of the Final Report is to include the following general suggested sections:

- Abstract including goals/objectives of the project
- Introduction and Background
- Survey of related literature to the Project subject
- Methodology
- Analysis
- Experimental data if applicable
- Results including comparison of analysis and experimental data
- Conclusions
- Recommended future work
- References
### Recommended Capstone Project Semester Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Deliverable</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-work</td>
<td>Think about project topic and learn software/technology for the project. Finalize and get approval for topic.</td>
<td>Written proposal using Proposal Cover Page</td>
</tr>
<tr>
<td>Week 1</td>
<td>Begin research/work</td>
<td>N/A</td>
</tr>
<tr>
<td>Week 3</td>
<td>Progress Briefing</td>
<td>PowerPoint or Report</td>
</tr>
<tr>
<td>Week 5</td>
<td>Progress Briefing</td>
<td>PowerPoint or Report</td>
</tr>
<tr>
<td>Week 7</td>
<td>Progress Mid-term Briefing</td>
<td>PowerPoint or Report</td>
</tr>
<tr>
<td>Week 9</td>
<td>Progress Briefing</td>
<td>PowerPoint or Report</td>
</tr>
<tr>
<td>Week 11</td>
<td>Progress Briefing</td>
<td>PowerPoint or Report</td>
</tr>
<tr>
<td>Week 13</td>
<td>Progress Briefing</td>
<td>PowerPoint or Report</td>
</tr>
<tr>
<td>Week 15</td>
<td>Final Project Deliverables</td>
<td>Final Oral Presentation and Completed, Final Report, and Planned Artifacts</td>
</tr>
</tbody>
</table>
Capstone Proposal Cover Page

This template must be completed and submitted to your Capstone Project Instructor and Academic Advisor for approval.

Student: ___________________________  Instructor: ______________________________

Advisor: __________________________

Employer: _____________________________________________________

Capstone Project Title: ________________________________________________

**Instruction**
The proposal should consist of the following sections:

I. Concise description of the project
II. Need or interest for the project
III. Technical approach to be taken
IV. Work to be done and detailed description of deliverables
V. Expected results
VI. Initial planned project schedule
ENGR 5315 MENG Capstone Checklist

To be started 1-2 semesters before requesting registration for capstone project:

☐ Complete minimum of 24 credits toward your degree.
☐ Discuss possible capstone projects topics with your academic advisor and obtain approval to start capstone project.
☐ Decide on a capstone project and title.
☐ Contact an instructor you are interested in working with for the project and ask them to serve as your capstone instructor.
  o **Note:** Your academic advisor can serve as both your advisor and capstone instructor.
☐ Draft capstone proposal using provided cover page.
☐ Send your draft capstone proposal to your instructor and academic advisor for review and approval **no later than** the end of the semester prior to your capstone.
☐ Contact the Professional Education team at soeprofed@uconn.edu and submit the capstone proposal cover page along with the written approvals from your advisor and instructor (email from advisor/instructor counts as written approval).
  o **Note:** Deadline for submission to Prof Ed is **no later than 1 week** prior to the start of your capstone semester.

Registration:

☐ Once the previous steps have been completed **and** you have approval to enroll from instructor, advisor, and Prof Ed, fill out a **Student Enrollment Request Form**.
  o Instructions to fill out the form:
    ▪ Select your term, “New Class”, and then “Add Independent Study”
    ▪ Check that all student information is correct.
      1. Home Campus is “Storrs”.
      2. Subject Area is “ENGR”.
      3. Check the “My course isn’t listed” box, then type in “ENGR 5315” in the required box that pops up. Type your project title in the Title box.
      4. Requested number of credits is “3”.
      5. Add your instructor and advisor to the corresponding sections and **submit** for approval.
    ▪ The form will go through the following approval process: Instructor > Advisor > Department head and then the **Registrar’s Office will manually enroll you in the course** (Questions? – Contact soeprofed@uconn.edu).
This form must be submitted before the first day of the semester.

During your capstone semester:

- Check in with advisor every 2 weeks at a minimum and enter dates below:
  __/____  __/____  __/____  __/____  __/____  __/____  __/____  __/____  __/____

- Prepare capstone presentation
- Prepare written report
- Schedule date with instructor and 1 additional faculty member for final presentation
  - Both will provide written feedback to student
- Present your capstone project
- Submit written report and completed checklist to instructor