ELECOMP CAPSTONE DESIGN PROGRAM

Fall 2020 Semester

Expectations & Deliverables

EXPECTATIONS

When senior year engineers commit to work on an ELECOMP Capstone Design Project, the important expectations of the Program Director are itemized below. Professor Sunak has further strengthened the foundation of the Program by recruiting 24 challenging projects from 18 sponsors; 9 of them are new sponsors. The effort required to get these projects is monumental, to say the least. You now have the amazing opportunity to get a fantastic “real-world” experience by putting your heart and soul into achieving the Anticipated Best Outcomes of the project you will be working on, in a team setting. Do not waste this opportunity to effectively launch your career in engineering, and prove your capabilities, expertise, innovation, critical thinking and learning from your excellent Technical Directors. Aspire to be one in the future, as many graduates of the Program!

• Read carefully these documents in the Student Section: Roadmap, Homeworks, Logbooks, Grading Breakdown and Formats of the various Reports that will be submitted. The other documents must also be studied carefully, after the teams have been formed.

• Plan to devote ample time to the project. These are real and challenging problems and will give you a fantastic “real-world” experience. These senior-year design Projects allow you to sharpen your learned engineering skills in a real-world environment. These include: problem analysis, design analysis, experimentation, use of leading CAD and analysis software, innovation, communication skills, and teamwork, often within an interdisciplinary team.

• To achieve the Anticipated Best Outcomes of the project, teams are expected to devote a total of about 500-750 hours per semester, depending on the number in the team. The average, over the last 4 years has been about 180 hours per semester, for each capstone designer.
• The teams will have weekly “meetings” their Technical Director/s on Friday afternoons, as 2.00pm-5.00pm is allocated capstone time in your schedule. No classes should be scheduled after 5.00 pm on Fridays, as you WILL be interacting with your TDs. There are 3 Options for these “meetings”: (i) online video conference; (ii) in-person meeting at the company facility; (iii) in-person meeting in FCAE, with all precautions in the Student Handbook. More details for each project, and options selected by the TD, will be posted.

• Tuesdays 5-8pm is also allocated capstone time in your schedule. ALL interactions will be carried out online with video conferencing, with the class of 71 designers. The rest of the time is for teams members to interact with each other online, and possibly with their TDs, and make further progress on the tasks for the project.

• Consulting Technical Directors, if assigned for your project, will be available online to interact with you and answer any questions. Take advantage of their expertise in your project. The Tuesday Progress Summary (TPS) will be submitted to your TDs, between 8.30pm and 9.30pm, highlighting the Technical Accomplishments made during the evening. The schedule of the TPS, together with WPRs and MPRs, has been posted on the website.

• Apart from the above 6 hours/week, you are expected to work another 10 hours/week on the project, either individually or with the team. You will indicate this in an excel spread sheet in your 1st email to the TDs.

• Depending on your schedule, the team, or individuals, can also meet with their TDs at other mutually convenient times, on other week days.

• Communicate regularly with your Technical Directors; all emails sent must be copied to the Program Director, Professor Sunak.

• Have a detailed agenda planned for your meetings on Friday afternoons, and also Tuesday evenings, if needed.

• Be on time, and don’t miss “meetings” or deadlines. Remember, this is like an 8-month “interview,” and it improves your marketability in the job
marketplace; you would have had real-world engineering responsibilities for 2 full semesters and it can end with an employment offer to you. It has happened very often in the past.

- Work as a team; respect all team members, their ideas and suggestions. Inspire and motivate each other. Remember **TEAM** means: **T**ogether **E**veryone **A**chieves **M**ore!

- Act professionally and ethically at all times. Students are representatives of the University, the College and the Department when they interact with their Technical Directors and others in the company.

**DELIVERABLES**
During the year, the team will have a set of deliverables; list commonly includes:

- Weekly Progress Reports (WPRs): submitted every Sunday evening between 8.00pm and 9.00pm. More details are on the website.

- Tuesday Progress Summaries (TPSs): submitted every Tuesday evening between 8.30pm and 9.30pm. More details are on the website.

- Major Progress Reports MPR#1 and MPR #2, for the Fall semester: More details are on the website.

- Major Progress Reports MPR#3, in the Spring: More details on the website.


- Video Presentations at the Fall “Virtual” Symposium, December 22\textsuperscript{nd}, 2020 and the May “Virtual” Summit, May 7\textsuperscript{th} 2021. This will be similar to what was done for the May 8\textsuperscript{th}, 2020 “Virtual” Summit. More details at: [https://web.uri.edu/elecomp-capstone/2020-virtual-summit/](https://web.uri.edu/elecomp-capstone/2020-virtual-summit/)

- Maintain a Log Book, as done in the “real-world.” More details on the website. This is a **very important** aspect, and one Homework will be focused on it.

- ABET Essays during both semesters. More details will be posted on the website.