

# Syllabus for Capstone Design (ICE3037-45), Fall 2021

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**Office Hour:** Wednesday 14:00-15:00

**Class Website:** <https://icampus.skku.edu/>

Welcome to ICE3037-45!

In this course, you will work for a team project called Capstone Design. For this project, two to three students construct a team. Each team selects a project topic such as IoT (Internet of Things), indoor navigation, indoor tracking, localization, vehicular safety application, and security and privacy. Each team makes a plan to proceed with the project and reports its progress every week. In the end of the semester, each team presents its team project with its technical paper, presentation slides, and implementation code. Our classes will be delivered in the form of flipped class, consisting of pre-class video lecture and class discussion. I hope you will enjoy this capstone design course!

## Detailed Class Information

**When:** Friday 9:00-11:45AM

**Where:**

- Meeting Link:  
<https://skku-ict.webex.com/skku-ict/j.php?MTID=mfe2473478f64e1497579175e754a1f54>
- Meeting Number: 2516 573 0209
- Password: #skku-capstone21

**Teaching assistant 1:** Mose Gu

- Graduate Student: Department of Computer Science and Engineering
- Research Lab: IoT Lab
- Office: 85461 in Corporate Collaboration Center
- Office Hour: Wednesday 14:00-15:00
- Phone: 031-299-4106
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**Teaching assistant 2:** Hyeonah Jung

- Graduate Student: Department of Computer Science and Engineering
- Research Lab: IoT Lab

- Office: 85461 in Corporate Collaboration Center
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- Phone: 031-299-4106
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### **Textbooks:**

1. Main Textbook: “Designing and Teaching Undergraduate Capstone Courses”, 1st edition, by Robert C. Hauhart and Jon E. Grahe. Jossey-Bass, published in January 2015.
2. Supplemental Textbook: “Software Engineering”, 8th edition, by Roger S. Pressman, McGraw-Hill, published in January 2014.

**Coursework:** Progress Report every week, Project Proposal, Midterm Report and Presentation, and Final Report and Presentation. (See schedule on the following pages.)

#### ***1. Weekly Progress Report***

Each team needs to submit a progress report every week in MS Powerpoint slides or Word document. The report should specify what work is done last week and what work will be done next week. It needs to specify the role and contribution of each team member.

#### ***2. Project Proposal and Presentation***

Each team will submit a project proposal and present its proposal.

#### ***3. Midterm Report and Presentation***

Each team will submit a midterm report and present its interim work.

#### ***4. Final Report and Presentation***

Each team will submit a final report and present its final work.

**Grading:** Grades will be based on attendance (3%), weekly progress reports (30%), project proposal/presentation (17%), midterm report/presentation (20%), and final report/presentation (30%). The guideline for grade is based on the following absolute scale for the total score 100:  $A+ \geq 85$ ,  $A \geq 80$ ,  $B+ \geq 75$ ,  $B \geq 70$ ,  $C+ \geq 65$ ,  $C \geq 60$ ,  $D+ \geq 55$ ,  $D \geq 50$ ,  $F < 50$ . The final grade boundary will be determined according to the guideline above and the class attitude along with the university grading policy.

Notes for Attendance:

1. When you are absent from class three times or more, you will be given F grade.
2. Absence with a reasonable reason without pre-notice will be considered one late attendance.
3. Two late attendances are equivalent to one absence.

**Important class policies (Please read carefully!):** Each weekly report must be submitted before the class on the due date. Work submitted after class will not be accepted. Also, all work must be done independently. I encourage all the team members work together with their own contributions on their team project.

**Website:** The information about the course will be posted on the course page in icampus (<https://icampus.skku.edu/>). The course slides and course notices are posted here. The page will also have an online forum through a web board, where students can discuss material related to the course. Please check the class web page regularly.

## Course Schedule

The schedule may be changed at instructor's discretion.

Week	Topic
1 (9/3)	Course Introduction
2 (9/10)	Team Formation
3 (9/17)	Project Topic Survey
4 (9/24)	Project Proposal
5 (10/1)	Project Proposal Submission and Presentation
6 (10/8)	Design 1
7 (10/15)	Design 2
8 (10/22)	Midterm Report Submission and Presentation
9 (10/29)	Implementation 1
10 (11/5)	Implementation 2
11 (11/12)	Implementation 3

12 (11/19)	Debugging
13 (11/26)	Project Documentation
14 (12/3)	Demo Preparation
15 (12/10)	Final Report Submission and Presentation

## Report Schedule

Report	Due	Where
Project Proposal	10/1 (Friday), 9:00AM	Icampus Course Website
Midterm Report	10/22 (Friday), 9:00AM	Icampus Course Website
Final Report	12/10 (Friday), 9:00AM	Icampus Course Website