1. Course number and name: **CSE702013 – Senior Project**

2. Credit: 2 (Computing topics); Required
   Contact hours: 2 (Discussion: 2/week)

3. Instructor's or course coordinator's name: Dr. Mai Xuan Trang

4. Text book: Course readings provided in class
   a. Required:
   b. Additional Textbooks (Optional):
   [1] Ian Sommerville, Engineering Software Products: An Introduction to Modern Software Engineering, 2019.

5. Specific course information:

   a. Catalog description of the content of the course:

   This course involves in-depth study and application of computing and informatics. Students work in teams to develop a simple product. Requires use of a development process that includes planning, specification, design, implementation, evaluation, and documentation. Students learn how to be a part of a team and how to contribute to the success of their teams' projects.

   b. Prerequisites: CSE703008 (C Programming), CSE702025 (Software Engineering)

6. Specific goals for the course:

   a. Course Learning Outcomes:

Course Learning Outcomes and Relationship to Student Outcomes:

At the end of the course, students will be able to	Student Outcome No.
LO.01 – Demonstrate familiarity of specifying the requirements and design the solution of a problem.	1
LO.02 – Implement a product prototype by constructing software or applying other techniques appropriate to the project	2
LO.03 – Demonstrate familiarity to communicate the details of the technical solution through verbal and written modes.	3
LO.04 – Demonstrate familiarity to incorporate professional, legal and ethical issues into the project development and documentation process.	4
LO.05 – Demonstrate the ability to work effectively in a project team.	5

   b. Related Student Outcomes:

No.	Information Technology / Computer Science graduates must have…
1	Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2	Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3	Communicate effectively in a variety of professional contexts.

4	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5	Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

7. Brief list of topics to be covered:
    - Problem Formulation
    - Requirements Specification
    - Design – Realization – Validation/Evaluation
    - Project Management
    - Teamworks
    - Constraints
    - Ethics and Professional Responsibilities