

Subject Description Form

Subject Code	CSE48405
Subject Title	Design Project for Structural and Fire Engineers
Credit Value	4
Level	4
Pre-requisite	All relevant CSE and BSE core subjects at Year 1 to 3
Objectives	To enable the students to develop the first hand practical design experience before graduation.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. identify, structure and analyze diverse problems arising from the changing constraints that influence engineering projects, such as economic, environmental, legal, social, health and safety, sustainability, and technological considerations; b. develop and function effectively in multi-disciplinary teams; c. synthesize logical solutions to structural and fire engineering problems independently with a creative and imaginative mind; d. work professionally and ethically; e. communicate logically and lucidly through drawing, calculation, and in writing; f. utilize the techniques, skills, and modern engineering tools necessary for engineering practice to meet desired needs within realistic constraints; g. cope with challenges and developments of the profession, including the increasing application of information technology in practice; h. recognize the need for, and to engage in life-long learning The above-mentioned are written in line with the outcomes of the degree programme.
Subject Synopsis/ Indicative Syllabus	Students will be required to participate in the formulation of conceptual solutions to a large scale structural and fire engineering problem, appraisal of the feasible schemes and then recommend the selected scheme with rationale and justification. For example, a link is required to connect two places within an existing building

[illegible]

	<i>Notes:</i> ^a Project Presentation: Consultation meetings (30%), presentation for schematic design (10%) and presentation for final design (10%). ^b Project Report: Seminar report, schematic design report (20%) and final design report (30%). Students will be required to attend a technical seminar closely relevant to the subject and submit a seminar report. Students must pass both the project presentation and project Report, and achieve a passing overall score/ grade to pass the subject.	
Student Study Effort Expected	Class contact:	Average hours per week
	▪ Consultation Meetings	2.7 Hrs.
	▪ Project Presentation and Feedback	0.3 Hrs.
	Other student study effort:	
	▪ Self Study and Project Works	9 Hrs.
	Total student study effort	12 Hrs.
Reading List and References	To be provided by the project supervisors.	