

Subject Description Form

Subject Code	CSE49406
Subject Title	Individual Project for Structural and Fire Engineering
Credit Value	6
Level	4
Pre-requisite	All relevant CSE and BSE core subjects in Years 1 to 3
Objectives	The objective of this subject is to train students to design a research type of work to solve problems in major structural and fire engineering areas.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: - apply the fundamentals of applied science, mathematics, and statistical methods to formulate effective solutions across a wide range of structural and fire engineering domains; - critically analyse and interpret data for an in-depth study of a particular process or subject area in the recognized major areas in structural and fire engineering; - cope with the challenges and developments of the profession, including the increasing application of information technology in real practices; - communicate logically and lucidly through drawing, calculation, and in writing; - present ideas and arguments verbally in formal presentations; - have critical and creative thinking and an ability to work independently; - recognize the need for and develop an ability to engage in life-long learning; - reflect on and review their progress, and seek assistance or guidance as appropriate in order to enhance the quality of their work.
Subject Synopsis/ Indicative Syllabus	Broadly, there are two main components, a critical assessment of appropriate literature and the completion of some experimental and/or theoretical work of an original nature. Literature reviews, in the absence of any significant laboratory, design, analysis, programming or fieldwork are not encouraged in the individual project.
Teaching/Learning Methodology	<u>Project Supervisor Allocation</u> Students are required to indicate their preference of supervisors (in priority order) based on their area of interest via an online platform and will be assigned a supervisor based on their current W GPA at the time of submission of the selection form. <u>Project Supervision and Progress</u> Students are expected to pursue “unaided” investigations relevant to the chosen topic. The supervisor only acts as a mentor to provide guidance and advice to the student throughout the project period. Although such guidance is available to the student, it is stressed that

	the ultimate responsibility for the direction and content of the project lies with the student. During the course of the Individual Project, each student is expected to submit a short, written report and give an oral presentation in English on the progress of the project to his or her supervisor <u>at least once in every two weeks</u> on average. Interim Report and Feedback Students are expected to submit a report for interim assessment by the moderator, who acts as an independent assessor/ reviewer of the student’s work. Students are expected to solicit feedback from the moderator for improvement of their work. <u>Final Deliverables</u> At the end of the project, students are expected to produce a final report, an oral presentation, and a poster as the final deliverables to demonstrate their research outcomes and evidence of learning. Students should submit a revised final report upon the comments given by the supervisor and the moderator. <u>Academic Integrity</u> In case of proven academic dishonesty, it would result in a disqualification of the Individual Project, and disciplinary actions will be taken by the Department or the Student Discipline Committee, in accordance with the relevant sections of the Student Handbook. Acts of academic dishonesty include but are not limited to cheating, plagiarism, unauthorized collaboration or help, fabrication and falsification of results, and aiding academic dishonesty. The use of Generative Artificial Intelligence beyond the allowed use stated in the Final Year Individual Project Guidelines is considered as an act of academic dishonesty. Detailed arrangements and requirements of the Final Year Individual Project would be communicated to students in a set of guidelines that will be updated on an annual basis. Students should refer to guidelines and requirements announced by the Department in case of discrepancies.																																																
Assessment Methods in Alignment with Intended Learning Outcomes	<table><tr><th rowspan="2">Specific assessment methods/tasks</th><th rowspan="2">% weighting</th><th colspan="8">Intended subject learning outcomes to be assessed</th></tr><tr><th>a</th><th>b</th><th>c</th><th>d</th><th>e</th><th>f</th><th>g</th><th>h</th></tr><tr><td>Project Proposal</td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Progress and Learning attitude</td><td>5</td><td></td><td></td><td></td><td></td><td></td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>Interim Report ++</td><td>20</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td><td></td><td></td></tr></table>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed								a	b	c	d	e	f	g	h	Project Proposal	0									Progress and Learning attitude	5						✓	✓	✓	Interim Report ++	20	✓	✓	✓					
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Interim Report ++	20	✓	✓	✓																																													

	Final Report	50	✓	✓	✓	✓					
	Oral Presentation	20	✓	✓	✓		✓				
	Revised Final Report	0									
	Poster	5				✓					
	Total	100 %									
++ Students must attain at least grade D in the Interim Report in order to attain a passing grade in the overall result.											
Student Study Effort Expected	Class contact:						Average hours per week (Semester 1 & 2)				
	• Project meeting with supervisor						0.5 hrs				
	Other student study effort:										
	• Self-study and research						7 hrs				
	• Preparation of report and presentation						1.5 hrs				
	Total student study effort						9 hrs				
Reading List and References	Relevant reading and/or references as suggested by individual supervisors.										