DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

CL448 Individual Project

Module Registrar: Dr A Ward	Taught To (Course): BEng/MEng Civil Engineering and BEng/MEng Civil and Environmental Engineering **Cohorts for whom class is compulsory**		
Other Lecturers Involved: Other staff (supervision)	Credit Weighting: 30	Semester: 1&2	
Assumed Prerequisites: None	Compulsory	Academic Level: 4	Suitable for Exchange: N

Module Format and Delivery (HOURS i.e. 1 credit = 10hrs of study):

Lecture	Tutorial	Laboratory	Groupwork	External	Online	Project	Assignments	Private Study	Total
						300			300

Educational Aim

In this course, the student aims to undertake an individual research investigation, including a literature study, critical assessments and original research work, which is presented in the form of a dissertation, poster and video abstract. The student pursues an intensive study in an area of interest under the supervision of a member of academic staff. The project involves research, which may include investigative, experimental, computational, or design work that is not of a routine nature. The project aims and plan of work must be agreed with the supervising member of staff as part of the course, but the student is responsible for managing their time and ensuring that they deliver the project successfully.

Learning Outcomes

On completion of the course the student is expected to be able to

LO1 Develop a methodology, design and carry out a programme of research work that is set in an appropriate engineering context.

LO2 Carry out a critical review of prior work and literature in the topic area., and present this concisely in a written, academic form.

LO3 Analyse and present the results of the study, and carry out critical assessments of existing and new information.

LO4 Communicate the work clearly and concisely in written and oral form to an educated engineering audience.

Syllabus

The course will teach the following:

Stage 1: Project Topic Selection (Summer/consolidation week Semester 1): Students will select project topics from the end of Year 3 through the end of the summer recess. Topics are allocated among a number of project advisors, to balance demand on any single member of staff. When making their project selections, students are invited to provide the reasons for the choice, which are taken into account during the allocation process where demand for a supervisor is high. As a result of this process, students are expected to have a clear topic focus by the start of Semester 1.

Stage 2: Project Workshops and Project Proposal (Semester 1): Students investigate, design, and propose an original project to be conducted on an individual basis. Skills sessions will be provided to support the development process. The project proposal should include an introduction to the topic; aims and objectives; literature overview; and proposed methodology. Preliminary results may be included, where applicable. The proposal is marked by the student's project supervisor/advisor and is worth 10% of the module mark.

Stage 3: Project work and Poster Presentation (Semester 1 Weeks 4-11, Semester 2, Weeks 0-8): Students should use the remainder of semester 1 and the early part of semester 2 to focus upon the practical aspects of the project. The poster presentation comprises 10% of the final mark and is an opportunity to practice presenting technical work, and get feedback on the

project to do. Some results may be available to present at this time, but if not the poster should focus upon the methodology and what the student expects to see/find.

Stage 4: In the consolidation week (Semester 2), students will be able to attend seminars on further key skills, such as using MS Word to write a dissertation, handling primary and secondary data. These seminars are designed to help the students analyse results and, when writing up their projects, present them neatly.

Stage 5: Final Work and Dissertation Report: Students carry out their research, practical or design work and write it up in the form of a dissertation, journal paper or technical report. The report presents and analyses the new information produced during the project. The dissertation should be written in an academic style and appraise the value of the work in the context of previous literature in related subjects. The text should be between 8,000 and 10,000 words, excluding title page, contents page, abstract, acknowledgements, declaration, tables, figures/table captions, references and appendices. The dissertation is worth 70% of the final mark. The dissertation is marked by at least two members of staff, one of whom is normally the student's supervisor.

Stage 6: Video Abstract: To help students develop digital literacy skills, a short video abstract must also be submitted at the same time as the dissertation. This should summarise the prior literature, the work carried out in the project and the relevance of the work in the context of previous work performed. The video abstract is worth 10% of the final mark.

Students are reminded of the University Regulations concerning plagiarism, and that all work of others must be acknowledged and cited properly. Students must submit all of their written work online via Turnitin. Advice on producing the dissertation, including referencing and the use of Turnitin, is given in a separate document.

Assessment of Learning Outcomes

For each of the Course Learning Outcomes the following criteria will be used to make judgements on student learning:

LO1 Develop a methodology, design and carry out a programme of research work that is set in an appropriate engineering context.
C1 The project aims and objectives are clearly defined in the project plan.
C2 A research methodology is developed which is capable of meeting the project aims.
C3 The project work is performed to a high standard, as demonstrated in the dissertation report, poster presentation and video abstract.

LO2 Carry out a critical review of prior work and literature in the topic area, and present this concisely in academic written form.
C1 The review of previous work is up to date and comprehensive, drawing from peer reviewed and scholarly literature
C2 The review identifies weaknesses in previous work and highlights areas where further research is required.

LO3 Analyse and present the results of the study, and carry out critical assessments taking into consideration existing and new information.
C1 Results of the project work are presented fully and logically in the dissertation report.
C2 Results of the project work are assessed and discussed in the context of previous work.

LO4 Communicate the work clearly and concisely in written and oral form to an educated engineering audience.
C1 The dissertation report is written in a clear and concise form, using a scholarly academic style of writing and describes the full scope of the work undertaken.
C2 The student is able to verbally communicate and discuss the work through a poster presentation and video abstract.

The standards set for each criterion per Module Learning Outcome to achieve a pass grade are indicated on the assessment sheet for all assessment.

Principles of Assessment and Feedback
(within Assessment and Feedback Policy at: https://www.strath.ac.uk/staff/policies/academic/)

PRINCIPLE 1. ASSESSMENT AND FEEDBACK PRACTICES PROMOTE EFFECTIVE STUDENT LEARNING
Assessment and feedback structure and timing is designed to support students from the project idea stage through final dissertation submission. Initial training is concentrated at the start of each semester to help students get started or resume their project work. Marked assessments are timed to encourage consistent working.

PRINCIPLE 2. ASSESSMENT AND FEEDBACK PRACTICES ARE APPROPRIATE, FAIR, AND TRANSPARENT
Assessment criteria are published to students and staff in advance of all submissions in dissertation guidance as well as summary instructions for each submission. Where appropriate, marking sheets are provided to students. Project proposal and poster, are not anonymous. Dissertations and video abstracts are double-marked blindly and marks are submitted to the registrar independently ahead of agreeing final marks for the dissertations. When necessary, a third marker is engaged.

PRINCIPLE 3. ASSESSMENT AND FEEDBACK PRACTICES ARE CLEARLY COMMUNICATED TO STUDENTS AND STAFF
All staff and students have access to the CL448 page on Myplace where guidance and assessment instruction sheets are provided. Notices ahead of submissions are also communicated by email to staff and students.

PRINCIPLE 4. ASSESSMENT AND FEEDBACK PRACTICES ARE CONTINUOUSLY REVIEWED
Assessment and feedback practices are reviewed annually and input is taken from students directly or via class representatives. Feedback from students is taken during the academic year as well.

Assessment Method(s) Including Percentage Breakdown and Duration of Exams

	Examinations				Courseworks		Projects	
	Number	Month(s)	Duration	*Weighting*	Number	*Weighting*	Number	*Weighting*
	0				3	10 (each)	1	70
L/Outcomes					LO 1,2, 3, 4		LO 1-4	

Indicate which learning outcomes (L01, L02 etc) are to be assessed by exam/coursework/project as required.

Coursework / Submissions deadlines (*academic weeks*):
Project Proposal – Week 9 S1
Poster Presentation – Week 7 S2
Video Abstract and Dissertation – Week 11 S2

Resit Assessment Procedures:

Resubmission of coursework prior to August exam diet.

PLEASE NOTE:
Students must gain a summative mark of 40% to pass the module. Students who fail the module at the first attempt will be re-examined during the August diet. This re-examination will consist entirely coursework. No marks from any previous attempts will be transferred to a new resit attempt.

Recommended Reading

Study skills guides (e.g.) The Study Skills Handbook (Cottrell, 2019) contain useful additional advice on time management, critical thinking and academic writing. These are available in the library.

Additional Student Feedback
(Please specify details of when additional feedback will be provided)

Date	Time	Room No

Session: Feedback on dissertation/project proposal should be sought from the project advisor. General feedback will be provided during the workshops throughout both semesters.

Approved:

Course Director Signature:
Date of Last Modifications:

(Updated May 2018)

MODULE TIMETABLE

Module Code:	CL448	Module Title:	Individual Project

Brief Description of Assessment:
1. Proposal– Short report submission including background, justification, and plans for practical work proposed by the student. Assessment carried out by supervisor.
2. Poster Presentation– Students present their methodology and work at a poster presentation session. Students are assessed on presentation quality, content, and handling of questions. Lines of discussion and questioning are intended as informal feedback to students (and students are encouraged to take full advantage of the opportunity to ask questions of their examiners if they want feedback on a specific area of their project). Further feedback is provided by supervisors after the presentation.
3. Dissertation– Final project report. Students are assessed against fixed criteria, which is published and provided well in advance of the submission. Dissertations are marked by at least two members of staff in a blinded process.
4. Video Abstract–Students produce a short video to describe the work carried out in the project and place this into context with existing literature. Video abstracts are marked by the same two members of staff responsible for marking the dissertation.

Assessment Timing:-

Indicate on the table below the start/submission dates for each assignment/project and the timing of each exam/assessment using the dropdowns provided. Dropdowns can be left blank. Add extra notes below the dropdowns.

Please note: Timings can and will change, this should only be used as a guide.

Semester One	W&D Wk	WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9	WK10	WK11	Exam Period
	Choose an item. Choose an item. Choose an item.	Course work Set Project Set	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Course work Submit Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item.
		All coursework handed out								Project Proposal Sumbitted			

| | C&D | | | | | | | | | | | | |

Semester Two	Wk	WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9	WK10	WK11	Exam Period
	Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item.	Course work Submit Choose an item.	Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item.	Thesis Submission Course work Submit	Choose an item.
								Poster presentaiton				Thesis and video abstract submitted	