MODULE DESCRIPTION FORM

CL 973 Independent Study in Collaboration with Industry

<table>
<thead>
<tr>
<th>Module Registrar: Dr Richard Lord, Senior Lecturer and KE Director, Department of Civil and Environmental Engineering</th>
<th>Taught To (Course):</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>MSc Sustainability &amp; Environmental Studies</td>
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<tr>
<td></td>
<td>MSc Environmental Engineering</td>
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<tr>
<td></td>
<td>MSc Hydrogeology</td>
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<tr>
<td></td>
<td>MSc Environmental Entrepreneurship</td>
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<table>
<thead>
<tr>
<th>Other Lecturers Involved: MSc course leaders; Contributions from external practitioners</th>
<th>Credit Weighting: 10</th>
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<tbody>
<tr>
<td></td>
<td>Semester: 1 + 2</td>
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<table>
<thead>
<tr>
<th>Assumed Prerequisites: None</th>
<th>Compulsory/ optional/elective class</th>
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<tbody>
<tr>
<td></td>
<td>Optional only for above degrees</td>
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<tr>
<td></td>
<td>Academic Level: 5</td>
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Module Format and Delivery (hours):

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Tutorial</th>
<th>Laboratory</th>
<th>Project</th>
<th>Assignments</th>
<th>Private Study</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>16</td>
<td></td>
<td>30</td>
<td>20</td>
<td>30</td>
<td>100</td>
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Educational Aim

Graduates increasingly need highly developed transferable professional skills to prepare for and to gain future employment. This module will allow students carrying out projects with industry to develop and refine these while gaining credits in the process. This could be for example the SME Carbon Audit that students carry out with training from Carbon Trust which involves 2 full day training workshop, one 2-hour guided carbon audit of one SME, produce a Carbon Audit report for the SME that will be checked for quality by Carbon Trust before being released to the SME. Approval of students being able to take this module would be done on case-by-case basis by MSc course leader as an individualised learning contract. Students will be selected by competitive application and CV. Other placements with industry are possible as long as a report needs to be produced for the industrial contact which can then be evaluated for assignment purposes.

Learning Outcomes

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

LO1 Be able to prepare a professional standard report of relevance to industry.

LO2 Be able to evaluate and apply to the specific project generic issues of copyright, ethics and H&S, and be able to record professional standard minutes of business meetings and apply other project management tools (e.g. Gantt charts).

LO3 Be able to summarize the benefits of the work carried out for the industry and be able to communicate that relevance for a wider audience via a press release or policy brief.

(UK SPEC suggests no more than 4 learning outcomes per module. Statements must be broad and be syllabus free and link in with the intended learning outcomes on the programme specifications.)

Syllabus

Students will have two lectures on copyright, ethics, H&S, minutes writing, good report writing and how to manage time and relationships during placement.

Tutorials will be provided to give feedback to the students regarding how work is going.

Other specialised training will be provided as applicable depending on the actual placement and work being carried out.

The assignments are critical for this class:

(1) Project work carried out for the industry – could be group work.
Assessment of Learning Outcomes

Criteria

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

[Note: Criteria break the LO down into 'teachable' elements but do not become syllabus orientated i.e. no mention of CAD package names, components etc.]

LO1
C1 How well written and structured the report for industry contact (assignment 1) is.
C2 How many drafts will be needed until the final version of report fits the quality criteria so it can be given to industry contact. (assignment 1)

LO2
C1 How the student shows a critical understanding of copyright, ethics and H&S (assignment 2)
C2 How well written and professional are the minutes (assignment 2)

LO3
C1 How well written and relevant for a general audience is press release or policy briefing (assignment 3).

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

12 Principles of Assessment and Feedback
(on Learning & Teaching web pages: www.strath.ac.uk/learnteach/teaching/staff/assessfeedback/12principles/)

Please state briefly how these are incorporated in this module.

3. Assistance (via tutorials) will be available to student to provide timely feedback.
4. Students will have ample opportunities (via several drafts of final report to give to industry contact) to incorporate feedback and improve their performance.
6. Group projects to create natural peer dialogue and realistic project management issues.
9. Departmental policy: carry out mid-term class assessments and provide feedback to students.
10. Establishment of MSc cohorts tend to foster the development of learning groups. They student interact closely with each other, and tend to be highly supportive.
11. Encourage self-motivation and mutual respect in group projects.

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

<table>
<thead>
<tr>
<th>Examinations</th>
<th>Courseworks</th>
<th>Projects</th>
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<tbody>
<tr>
<td>Number</td>
<td>Duration</td>
<td>Weighting</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>20% (2)</td>
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<tr>
<td>LO2, LO3</td>
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Indicate which learning outcomes (L01, L02 etc) are to be assessed by exam/coursework/project as required.

(4) Project work carried out for the industry – could be group work.
(5) Individual report critically evaluating the experience of work carried out; issues of copyright, ethics and H&S to be discussed as applicable; appendix to include minutes of meetings.
(6) Press release or policy brief about the work carried out – could be group work.
Coursework / Submissions deadlines:
Assignment 1 – week 10 (Semester 2)
Assignment 2 – week 11 (Semester 2)
Assignment 3 – week 12 (Semester 2)

Resit Assessment Procedures:
Students who fail the module at the first attempt will be re-examined during the August diet. This re-examination will consist entirely of exam / coursework / viva (please delete as appropriate).

PLEASE NOTE:
Students need to gain a summative mark of 40% / 50% (please delete as appropriate) to pass the module.

Recommended Reading

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

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<tr>
<th>Date</th>
<th>Time</th>
<th>Room No</th>
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<tr>
<td>Weeks 5 (S1), 5 (S2)</td>
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Session:

Approved:

Course Director Signature:

Date of Last Modifications: 23/04/2012
(Updated November 2010)
Module Code: CL9XX  
Module Title: Independent Study in Collaboration with Industry

**Brief Description of Assessment:**
Assessment Method(s) Including Percentage Breakdown and Duration of Exams
The standards set for each criterion per Module Learning Outcome to achieve a pass grade are indicated on the assessment sheet for all assessment.

The course will be assessed by three assignments:

1. Project work carried out for the industry – could be group work [worth 70% of final mark for this class; mark for project will be calculated based on the quality of 1st draft (worth 60% final mark for this assignment) and quality of final report (worth 40% final mark for this assignment).](#)
2. Individual report critically evaluating the experience of work carried out; issues of copyright, ethics and H&S to be discussed as applicable; appendix to include minutes of meetings (worth 20% final mark).
3. Press release or policy brief about the work carried out – could be group work (worth 10% final mark).

**Assessment Timing:-**

Indicate on the table below the Start/Submission dates for each Assignment/Project and the timing of each Exam/Class Test(s).

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<tr>
<th>Semester One</th>
<th>WK1</th>
<th>WK2</th>
<th>WK3</th>
<th>WK4</th>
<th>WK5</th>
<th>WK6</th>
<th>WK7</th>
<th>WK8</th>
<th>WK9</th>
<th>WK10</th>
<th>WK11</th>
<th>WK12</th>
<th>Exam Period</th>
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<th>Semester Two</th>
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<th>WK2</th>
<th>WK3</th>
<th>WK4</th>
<th>WK5</th>
<th>WK6</th>
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<th>WK9</th>
<th>WK10</th>
<th>WK11</th>
<th>WK12</th>
<th>Exam Period</th>
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<td>Assignm ent 1</td>
<td>Assignm ent 2</td>
<td>Assignm ent 3</td>
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