CI9-FM-13 Research Project

<table>
<thead>
<tr>
<th>Course leader:</th>
<th>Dr Marios Christou</th>
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<tbody>
<tr>
<td>Other contributors:</td>
<td>TBC</td>
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<tr>
<td>Module status:</td>
<td>Core</td>
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<tr>
<td>Pre- or co-requisites:</td>
<td>CI9-FM-01 to CI9-FM-12</td>
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<tr>
<td>Term:</td>
<td>Summer</td>
</tr>
<tr>
<td>Contact hours:</td>
<td>0</td>
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<tr>
<td>ECTS units:</td>
<td>30</td>
</tr>
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<td>FHEQ Level:</td>
<td>7</td>
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<tr>
<td>Assessment:</td>
<td>Dissertation, literature review and oral presentation</td>
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1.0 Aims

To undertake a specific piece of independent research in the form of a critical review, a laboratory- or field-based experimental investigation, or a modelling/numerical analysis project.

2.0 Syllabus

The study will be supervised by one of the academics in the Fluid Mechanics section within the Civil & Environmental Engineering Department. Some students may opt to undertake their research project as part of an industry placement.

The students will be given an introduction to research techniques such as:

- Guide to technical writing
- Presentation skills
- Citations and reference manager
- Database searching

The research project will begin with an intensive literature review within their research area. The research project may be analytical, theoretical, experimental or numerical in nature, or a combination of these.

The students will submit a literature review, a technical report and give a final presentation at the end-of-year student conference. All three of these deliverables will be assessed by the supervisor and second examiner.

3.0 Intended learning outcomes

On successfully completing this module, students will be able to:

- Contribute to an active research area.
- Defend research output under critical questioning.
- Effectively communicate using writing and presentation skills.
- Managing their time effectively.
- Critical analysis techniques and creatively solve challenging problems.

4.0 Teaching methods

The module will be delivered through a suite of introductory lectures on research methods and related material of importance to undertaking a research project, with students spending the remainder of the time working independently (under staff supervision, with possible support from PDRA and PhD researchers) on their projects to meet the research aims and objectives. Where appropriate students will be trained in experimental methods, use of analytical techniques, specialist software and computational tools.

5.0 Assessment

Assessment information will be provided separately.

6.0 Recommended textbooks

Category as defined by Central Library: C = Core, S = Supplementary