Unit Coordinator
Dr Britta Bienen

Lecturers
Dr Britta Bienen (Centre for Offshore Foundation Systems)
Room: 1102, Civil Engineering Building
e-mail: britta.bienen@uwa.edu.au

Dr Andrew Deeks (Guest lecturer, Advanced Geomechanics)
e-mail: andrewd@ag.com.au

Prof. Christophe Gaudin (Centre for Offshore Foundation Systems)
Room: 1110E, Civil Engineering Building
e-mail: christophe.gaudin@uwa.edu.au

Prof. Mark Randolph (Centre for Offshore Foundation Systems)
Room: 1106, Civil Engineering Building
e-mail: mark.randolph@uwa.edu.au

Dr Marc Senders (Guest lecturer, Woodside)
e-mail: Marc.Senders@woodside.com.au

Introduction
This unit covers analytical techniques for design of shallow foundations, caissons, piles, embedment anchors and mobile jack-up drilling rigs; the geology and geotechnical properties of seabed sediments in hydrocarbon producing regions; geohazards in offshore environments; and offshore site investigation techniques and methods of sediment characterisation. The unit comprises 39 lectures and 26 tutorials sessions.

Lecture Outline
For details of times and venues of all teaching sessions consult the university timetable at http://www.timetable.uwa.edu.au

Mid-semester break:

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<tr>
<th>Weeks</th>
<th>Lecturer</th>
<th>Notes</th>
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<tbody>
<tr>
<td>1-2</td>
<td>MS</td>
<td>Site Investigation</td>
</tr>
<tr>
<td>3-5</td>
<td>AD</td>
<td>Piles</td>
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<tr>
<td>5-7</td>
<td>MR</td>
<td>Shallow Foundations</td>
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<tr>
<td>8</td>
<td>BB</td>
<td>Jack-ups</td>
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<tr>
<td>10-11</td>
<td>BB</td>
<td>Jack-ups</td>
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<tr>
<td>12-14</td>
<td>CG</td>
<td>Anchors</td>
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<tr>
<td>14</td>
<td>BB</td>
<td>Revision/overrun</td>
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Assessment

Assessment consists of five assignments and a final examination. Final grading of the unit is based on semester two only. No supplementary assessment will be available for the unit. Final unit marks may be modified in accordance with Faculty policy (see http://www.ecm.uwa.edu.au/for/students/assess).

Contribution

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Contribution</th>
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<tbody>
<tr>
<td>5 tutorial assignments</td>
<td>40%</td>
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<tr>
<td>Exam</td>
<td>60%</td>
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Late submission of tutorial assignments will incur a penalty of 10% per day. Late assignments will not be accepted if marked assignments have already been returned to the other students in the class.

Assignments

1. Site investigation
2. Piles
3. Shallow foundations
4. Jack-ups
5. Anchors

Exam – 5 x 35 minute questions

Recommended Reading

Book: Offshore Geotechnical Engineering by Mark Randolph and Susan Gourvenec (Taylor & Francis)

The unit will be supported by notes issued during the lectures.

Other Information

- University guidelines on Academic Misconduct (see http://www.ecm.uwa.edu.au/for/students/plagiarism)
- Faculty Policy for Appeals (see http://www.ecm.uwa.edu.au/for/students/exams)
- Charter of Student Rights (see http://www.secretariat.uwa.edu.au/home/policies/charter)