Description: Technology Management Practice

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cat-nbr</th>
<th>Class</th>
<th>Term</th>
<th>Mode</th>
<th>Units</th>
<th>Campus</th>
</tr>
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<tbody>
<tr>
<td>ENG</td>
<td>8205</td>
<td>67250</td>
<td>2, 2007</td>
<td>OWC</td>
<td>1.00</td>
<td>Toowoomba</td>
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Academic group: FOENS
Academic org: FOENSV
Student contribution band: 2
ASCED code: 039999

STAFFING
Examiner: David Thorpe
Moderator: Ron Ayers

RATIONALE
Engineers and technology managers may, at various times in their careers, be responsible for the administration and control of projects. It is therefore essential that such people have a sound knowledge of organisational principles, human resource management, financial management, and contract administration.

SYNOPSIS
The course briefly revises and then builds upon basic undergraduate management studies in the major areas of project estimating and planning, feasibility studies, contract law, financial management, management theory and personnel management.

OBJECTIVES
The course objectives define the student learning outcomes for a course. The assessment item(s) that may be used to assess student achievement of an objective are shown in parenthesis. On completion of this course, students should be able to:

1. describe basic management principles for technology management (Assignment 1, Exam);
2. estimate and program engineering and technology projects (Assignment 1, Exam);
3. prepare and evaluate engineering feasibility studies (Assignment 1, Exam);
4. demonstrate a knowledge of contract law and industrial law through applying the principles to documented cases (Assignment 1, Exam);
5. prepare and administer engineering and technology contracts (Exam);
6. demonstrate a knowledge of cost control techniques for typical engineering and technology projects (Exam);
7. demonstrate a knowledge of personnel management through applying its principles to the management of human resources in an engineering environment (Exam);
8. prepare and control an engineering or technology office management system (Exam).
### TOPICS

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
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</thead>
<tbody>
<tr>
<td>1. Management principles: leadership, management functions, decision making</td>
<td>10.00</td>
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<tr>
<td>2. Project and works management: strategic and project planning, program and project management, estimating, purchasing and inventory management, office management, plant and equipment management</td>
<td>20.00</td>
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<tr>
<td>3. Project Feasibility: feasibility studies, lifecycle cost and benefit, comparison of alternatives</td>
<td>15.00</td>
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<tr>
<td>5. Legal environment of engineering and technology management: legal responsibility, industrial relations, professional negligence, arbitration, intellectual property law</td>
<td>10.00</td>
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<tr>
<td>6. Project Delivery Methods: project delivery options, project and works procurement, contract management, modern forms of project delivery</td>
<td>15.00</td>
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<tr>
<td>7. Accounting methods and cost control: accounting and book keeping principles, project and operations costing, budgeting and budgetary control</td>
<td>10.00</td>
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<tr>
<td>8. Personnel Management: human resource management and development, selection and recruiting, occupational health and safety, industrial awards</td>
<td>10.00</td>
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</table>

### TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at http://bookshop.usq.edu.au click 'Semester', then enter your 'Course Code' (no spaces).

### REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.


**STUDENT WORKLOAD REQUIREMENTS**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
</tr>
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<tbody>
<tr>
<td>Assessment</td>
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<tr>
<td>Directed Study</td>
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<tr>
<td>Examinations</td>
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<tr>
<td>Private Study</td>
<td>33.00</td>
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<tr>
<td>Tutorials</td>
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</table>

**ASSESSMENT DETAILS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Marks out of</th>
<th>Wtg(%)</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSIGNMENT 1</td>
<td>500.00</td>
<td>50.00</td>
<td>14 Sep 2007</td>
</tr>
<tr>
<td>2 HOUR CLOSED EXAMINATION</td>
<td>500.00</td>
<td>50.00</td>
<td>END S2</td>
</tr>
</tbody>
</table>

(see note 1)

**NOTES**

1. Examination dates will be available during the semester. Please refer to the examination timetable when published.

**IMPORTANT ASSESSMENT INFORMATION**

1. Attendance requirements:
   It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.

2. Requirements for students to complete each assessment item satisfactorily:
   To complete each of the assessment items satisfactorily, students must obtain at least 50% of the marks available (or at least a grade of C-) for each assessment item. Furthermore, at least 20% of the total marks for the course is allocated to explicit assessment of good communication skills.

3. Penalties for late submission of required work:
   If students submit assignments after the due date without prior approval then a penalty of 20% of the total marks available for the assignment will apply for each working day late.
4 Requirements for student to be awarded a passing grade in the course:
To be assured of receiving a passing grade a student must achieve at least 30% in all of the weighted assessment items, achieve at least 50% in the examination and at least 50% of the total weighted marks available for the course.

5 Method used to combine assessment results to attain final grade:
The final grades for students will be assigned on the basis of the weighted aggregate of the marks (or grades) obtained for each of the summative assessment items in the course.

6 Examination information:
In a Closed Examination, candidates are allowed to bring only writing and drawing instruments into the examination.

7 Examination period when Deferred/Supplementary examinations will be held:
Any Deferred or Supplementary examinations for this course will be held during the examination period at the end of the semester of the next offering of this course.

8 University Regulations:
Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL http://www.usq.edu.au/corporateservices/calendar/part5.htm or in the current USQ Handbook.

ASSESSMENT NOTES

1 The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner.

2 Students must retain a copy of each item submitted for assessment. This must be produced within five days if required by the Examiner.

3 In accordance with University's Assignment Extension Policy (Regulation 5.6.1), the examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances.

4 The Faculty will normally only accept assessments that have been written, typed or printed on paper-based media.

5 The Faculty will NOT accept submission of assignments by facsimile.

6 Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the examiner of the course to negotiate such special arrangements.

7 In the event that a due date for an assignment falls on a local public holiday in their area, such as a Show holiday, the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the Examiner's convenience.

OTHER REQUIREMENTS

1 Students will require access to e-mail and internet access to USQConnect for this course.