# Subject Description Form

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>COMP5211</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title</td>
<td>Software Engineering Concepts</td>
</tr>
<tr>
<td>Credit Value</td>
<td>3</td>
</tr>
<tr>
<td>Level</td>
<td>5</td>
</tr>
<tr>
<td>Pre-requisite/ Exclusion</td>
<td>Nil</td>
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## Objectives
The objectives of this subject are to:

1. provide a sufficient insight into the software development environment;
2. provide a detailed knowledge of the application of typical software engineering techniques;
3. provide appreciation of CASE tools.

## Intended Learning Outcomes
Upon completion of the subject, students will be able to:

a) explain the software development life cycle;
b) know the basic techniques for requirement engineering, software design, and testing;
c) understand the CASE technology;
d) understand the maintenance issues and process; and
e) understand the need for coding standard, portability and reusability.

## Subject Synopsis/Indicative Syllabus
- **Software Implementation**: Structured Coding Technique and Style Portability and Reusability.
- **Software Testing and Maintenance**: Software Quality Assurance, Software Verification and Validation Techniques, Re-engineering and reverse engineering concepts, Maintenance Issues.
- **Usability and usability engineering**: Software usability, Usability engineering.

## Teaching/Learning Methodology
Class activities including - lecture, tutorial, lab, workshop seminar where applicable

## Assessment Methods in Alignment with Intended Learning Outcomes

<table>
<thead>
<tr>
<th>Specific Assessment Methods/Tasks</th>
<th>% weighting</th>
<th>Intended subject learning outcomes to be assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments, Tests &amp; Projects</td>
<td>55</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td></td>
<td>Final Examination</td>
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<td>--------------------------------</td>
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<tr>
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<td></td>
<td>45</td>
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<tr>
<td><strong>Total</strong></td>
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<td>100</td>
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**Student study effort expected**

**Class Contact:**
- Class activities (lecture, tutorial, lab) 39 hours

**Other student study effort:**
- Assignments, Quizzes, Projects, Exams 65 hours

**Total student study effort** 104 hours

**Reading list and references**