# Computing and Software Systems

## 2015 SAMPLE COURSE PLANS

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<th>12.5pts University Level Mathematics</th>
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<td>Semester 2</td>
<td>COMP20003 Algorithms and Data Structures</td>
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The Computing and Software Systems major is designed for students who wish to develop considerable technical expertise, including exposure to a variety of programming paradigms, an understanding of the systematic processes underpinning the software development lifecycle, and an appreciation of advanced topics in computing.

Graduates from the Computing and Software Systems major who have completed specific subjects are eligible to attract Australian Computer Society (ACS) accreditation.

### What careers can this major lead to?
Software engineers are in demand in many places. They are needed by many large companies such as Telstra and BHP, by banks, airlines, CSIRO, the Department of Defence and other government bodies, and by smaller development companies.

You could work for both large and small organisations in a wide range of industries, including the telecommunications, manufacturing, airlines, electronic entertainment, banking and finance, e-commerce and specialised software industries. Job titles may include:

- designer and developer
- project manager
- database manager
- systems analyst
- business systems consultant
- web producer
- network systems engineer
- programmer and infrastructure architect

### What graduate courses does Software Systems lead to?
Graduates who major in Software Systems will be eligible to continue on to the Master of Engineering (Software). You will also be well-placed to apply for:
• Professionally focused graduate degrees in the sciences and technology, including biotechnology, environmental systems, informatics, management science, and nanotechnology
• Graduate degrees preparing for a wide range of professions including engineering, law, medicine and other health sciences, and teaching
• Masters and Honours pathways to research higher degrees in the sciences and technology within the Melbourne Graduate School of Science, Melbourne School of Engineering, Melbourne School of Land and Environment, and the Faculty of Medicine, Dentistry and Health Sciences