



Mechanical and Manufacturing Engineering

Course Outline

Term 2 2019

MTRN3500 COMPUTING APPLICATIONS IN MECHATRONICS SYSTEMS

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After successfully completing this course, you should be able to:

Learning Outcome	EA Stage 1 Competencies
1. Be well versed with structured and modular programming using C/C++ and to have appreciated the use of software to communicate with external devices.	PE1.1
2. Be able to understand data structures, data transfer and	

6. Assessment

Assessment overview

Assessment	Group Project? (# Students per group)	Length	Weight	Learning outcomes assessed	Assessment criteria	Due date and submission requirements	Deadline for absolute fail	Marks returned
Programming assignment [†]	No							

It is your responsibility to ensure that your calculator is of an approved make and model, and to obtain an “Approved” sticker for it from the [Engineering Student Support Services Centre](#) prior to the examination. Calculators not bearing an “Approved” sticker will not be allowed into the examination room.

Special consideration and supplementary assessment

If you have experienced an illness or misadventure beyond your control that will interfere with your assessment performance, you are eligible to apply for Special Consideration prior to submitting an assessment or sitting an exam.

Please note that UNSW now has a [Fit to Sit / Submit rule](#), which means that if you sit an exam or submit a piece of assessment, you are declaring yourself fit enough to do so and cannot later apply for Special Consideration.

For details of applying for Special Consideration and conditions for the award of supplementary assessment, please see the information on UNSW’s [Special Consideration page](#).

7. Expected resources for students

Recommended Textbooks

- x J.Katupitiya & K. Bentley, "Interfacing with C++", Springer 2006
- x P.H. Winston, "On to C", Addison Wesley
- x P.H. Winston, "On to C++", Addison Wesley

Additional Readings

The relevant chapters from the text book “Interfacing with C++” are available on Moodle Homepage of MTRN3500 together with a number of additional documents. Some materials from earlier years may also be available at Moodle’s MTRN3500 Home page.

UNSW Library website: <https://www.library.unsw.edu.au/>

Moodle: <https://moodle.telt.unsw.edu.au/login/index.php>

8. Course evaluation and development

Feedback on the course is gathered periodically using various means, including the UNSW myExperience process, informal discussion in the final class for the course, and the School’s Student/Staff meetings. Your feedback is taken seriously, and continual improvements are made to the course based, in part, on such feedback.

In this course, recent improvements resulting from student feedback include progressive assessment in contrast to bulk assessment at the end of the term.

9. Academic honesty and plagiarism

