

TER3M1 – Computer Engineering Robotics Focus Course Summary

This course examines computer systems and control of external devices. Students will develop knowledge and skills in electronics, robotics, programming, and networks, and will build systems that use computer programs and interfaces to control and/or respond to external devices. This course will focus on the hardware and software related to robotics and control systems.

Major Units of Study

- Computer programming in Java and C++
- Electronics
 - building circuits
 - electrical theory, measurement and calculation
 - use of integrated circuits
- Interfacing / Robotics
 - Writing computer code to control electronic devices
 - Building robots or devices to solve specific problems

Key Knowledge and Learning Skills Recommended

- Strong ability in Math, Science
- Problem solving skill
- The ability to work independently and make good use of class time
- The ability to work in a team and contribute to that team

Who should take this course?

- Students intending to go on to University in any program, especially Technology, Computer Science, and Engineering based programs
- Students intending to go on to college in a Programming, Technology, Science, or Engineering based program
- Students who have an interest and/or experience with computer technology and are willing to work hard and learn