

TEJ 3M1 Computer Engineering Technology Grade 11, University & College Preparation

General Course Information

Prerequisite: Open

Department: Computers Studies / Technology
Extra Help: By appointment with your teacher

Textbook and Replacement Cost: An Introduction to Computer Engineering, \$40

Material Required: None Course Fee: None

Course Description

This course helps students understand how computer hardware and software are used to solve computer-related problems from an engineering perspective. Students will explore ways of connecting computers, interfaces, and peripherals using their knowledge of logic gates, computer components, peripherals, programming, networks, and operating systems. Students will also construct systems that use computer programs to interact with hardware, install and configure key computer hardware and software components, develop an understanding of the ethical use of computers, and explore careers in computer engineering.

The course is organized into 4 strands:

- Computer Hardware
- Operating Systems and Networking
- Electronics, Robotics and Computer Interfacing
- Data Representation and Digital Logic

A detailed list of the course expectations can be found at

http://www.edu.gov.on.ca/eng/curriculum/secondary/2009teched1112curr.pdf

Assessment and Evaluation

To promote student success, ongoing assessment and feedback will be given regularly to the students. A variety of assessment and evaluation strategies will be used in this course, including

[Click here and type list of assessment and evaluation strategies used in this course]. Expectations will be evaluated based on the provincial curriculum expectations and the achievement levels outlined in the ministry document.

Expectations are organized into four categories of knowledge and skills. The categories and their corresponding weighting is as follows:

Knowledge and Understanding 25% Thinking 25% Communication 20% Application 30%

Each student's final mark will be in the form of a percentage grade based on their achievement in the 4 categories on the achievement chart. The breakdown of the final mark is as followed:

Term Evaluation 70% Final Evaluation 30%

The final Evaluation will be completed during the final 6 weeks of the course and may include a variety of summative activities including an exam, a presentation, a seminar, or an essay or another writing assignment.

In addition to students' performance in the achievement categories, students will also be assessed on their performance in the following learning skills:

- Responsibility
- Organization
- Independent Work
- Collaboration



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- Initiative
- Self-Regulation

For specific policies on assessment and evaluation, and academic honesty, please refer to *School Procedures* in the student agenda.

Course Units

- 1. Computer Hardware and Operating Systems (20 Hours)
- 2. Computer Programming and Interfacing (25 horus)
- 3. Networking Concepts (10 hours)
- 4. Digital Logic and Electronic Circuits (20 Hours)
- 5. Using Arduino (30 hours)

Classroom Expectation

- Academic Honesty Students are expected to be academically honest by submitting their own original work, and the mark received is intended to reflect their own academic achievement.
- Online Code of Conduct as in the school agenda or http://www.tdsb.on.ca/communications/code_of_online_conduct/occ.html
- Respect for Property no food or drink in the lab
- Policy on late or missed evaluations as in the school agenda