# WESTERN TECHNICAL-COMMERCIAL SCHOOL



**Course Title:** 

**Grade 11 Computer Engineering** 

**Teacher Name and Contact:** 

M. Franzen (michael.franzen@tdsb.on.ca)

**Prerequisite:** 

None

Course Code:

TEJ3M1

Date:

2023/2024

**Virtual Learning Resources:** 

<u>Google Classroom</u>, & <u>www.mfranzen.ca</u>

### **COURSE OVERVIEW:**

This course is in alignment with our whole school commitment to be inclusive, equitable, and non-discriminatory, by affirming student identities and experiences. We will continue to work towards eliminating systemic barriers and will intentionally include and celebrate content and voices from communities who are historically underrepresented and marginalized. We will use the curriculum as a tool to see the diversity in our community and work together to name and disrupt oppression when we see it.

#### **Course Strands:**

# A: Safety & Careers

**B**: Computers & Components

C: Digital Logic & Circuits

D: Networking & Components

E: Interface & Controls

Intro, expectations, routines, organization, and career pathways Computer operation, maintenance, troubleshooting, and design Binary, boolean, logic gates, circuit theory, and calculations IP addressing, data routing protocols, services, and languages Electronic hardware, programming, troubleshooting and design

### **ASSESSMENT & EVALUATION:**

Students will be assessed in an ongoing fashion throughout the semester. Their final grades will reflect their most consistent demonstration of skills, while taking their most recent demonstrations into consideration. Assessments and evaluations may include products such as: primary source analysis, presentations, roundtable discussions, tests and quizzes, written responses, and media products. Assessment and evaluation will also include and emphasize observation of the student process and conversations with the student to gauge level of understanding.

Student achievement is measured relative to curriculum expectations across four weighted achievement categories: Knowledge/Understanding, Thinking/Investigation, Communication, and Application.

#### Course Mark Breakdown

Term Work - 70%	May consist of the evaluations stated above
Culminating Activities - 30%	Will consist of a culminating project (20%) and learning portfolio (10%)

**Course Themes:** 

<sup>\*\*</sup>Strand A is integrated through-out the course, while strands B-E are covered chronologically and thematically as units of study.

<sup>\*\*</sup>These themes are infused into the units of study.

### STUDENT LEARNING SKILLS:

Transferable learning skills are a focal point of our programming at WTCS. Listed below are clear and specific expectations for our students that will foster these skills:

Learning Skill:	Student Expectations:	
Responsibility & Organization:	Adhering to assignment timelines is a valuable skill and students should manage their time effectively. <u>Outcomes for incomplete evaluations may include a reduction in grade, an alternative task, or a lost opportunity to demonstrate understanding.</u>	
Attendance & Engagement:	Attendance and participation is integral to learning; teachers must have opportunities to observe and have conversations with students in order to assess them properly. Absences are expected, but students will be responsible for catching up on missed work.	
Academic Honesty:	All students must make <u>responsible use</u> of assistive technology that helps them to refine their own authentic work. Inappropriate use of this technology constitutes academic dishonesty and will be addressed by the teacher with appropriate consequences.	
Self-Regulation:	Teachers provide guidelines around the use of technology in class that students are expected to follow. Student use of personal devices that distracts from learning will not be permitted. Students have the right to an inclusive and constructive learning environment and have a responsibility to maintain this environment for themselves and their peers.	
Initiative:	Self-advocacy: <u>Students should be proactive in working together with their teacher to determine</u> when support and accommodations are needed for student success. They are expected to be active and fully engaged in the process of their own learning.	

#### SUPPORTING STUDENTS:

Teachers will use techniques to help students learn in a variety of ways, which may include breaking down information into smaller parts, offering multiple entry points to start learning, demonstrations, samples, using visuals and hands-on activities. Also will be provided through a website: <a href="www.mfranzen.ca">www.mfranzen.ca</a> course lesson related details, a daily class journal to see what is happening, and an online marks page to see latest current marks. Students will be encouraged to work in small groups, with peer partners, student mentors, and ask questions. Daily structured routines will be used for daily consistency and mornings prior to classes are available for extra help if needed. This ensures that students have different options to approach classroom materials and removes barriers to students' success, allowing them to fully demonstrate their learning. Students will have the opportunity to utilize technology to enhance their learning and <a href="www.mfranzen.ca">will be given time accommodations appropriate for the task</a>.

# **HEALTH & WELLNESS:**

WTCS is committed to creating an environment for students, staff, and families that supports overall wellness and respects boundaries between work and personal time:

- **Teachers** will strive to return all communications in a timely fashion, during work hours; they will avoid disrupting students and families during "at home" hours.
- **Students** will do their best to communicate with teachers during school hours. They should plan to speak with teachers during class time if they think they will need support in completing work outside of school.

- **Caregivers** should be aware that teachers may not immediately respond to communications sent outside of work hours. Teachers will endeavour to respond promptly at available times during the work day.
- Students should carefully select extracurricular activities that will not interfere with work completion and attendance. The suggested guideline is **one regular or continuous extracurricular commitment per season** (i.e. sports team, club, competition etc.).

# **GUARDIAN & STUDENT ACKNOWLEDGEMENT:**

Please take a moment to collectively review the 2023-24 WTCS Course Outline. In the space below, please provid your name and signature to acknowledge that you understand and will follow the laid out expectations and policies.		
Guardian Name	Guardian Signature	
Student Name	Student Signature	