Ontario	**Ontario Ministry of Education** www.edu.gov.on.ca /eng/	Toronto District School Board	**Toronto District School Board** *www.tdsb.on.ca*		**R.H. KING ACADEMY** http://schools.tdsb.on.ca/ *rhking/*

COURSE OF STUDY OUTLINE			
Department	*Computer Studies*	**Course Type**	*University/College*
Teacher	*Mr. Raptou*	**Grade**	*11*
Course Title	*Computer Technology*	**Credit Value**	*One*
Course Code	*TEJ3M*	**Prerequisites**	*Grade 10 ICS2O/TEJ2O*
Ministry Document	*The Ontario Curriculum.* http://www.edu.gov.on.ca/eng/curriculum/secondary/computer10to12_2008.pdf		
Learning Resources	*Course Electronic folder, Textbook, Student binder, Course Web site, Visual Studio Programming Environment, C# programming Language for Interfacing*		

TEJ3M COURSE: COMPUTER ENGINEERING

COURSE OVERVIEW – COMPUTER TECHNOLOGY, GRADE 11, UNIVERSITY/COLLEGE (TEJ3M)

A. COURSE DETAILS Course Description and Overview

This course examines computer systems and control of external devices. Students will assemble computers and small networks by installing and configuring appropriate hardware and software. 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. Students will develop an awareness of related environmental and societal issues, and will learn about college and university programs leading to careers in computer technology.

B. OVERALL EXPECTATIONS

COMPUTER TECHNOLOGY FUNDAMENTALS	
UNIT	Expectation
Computer Hardware	describe how computer components function, and discuss trends in the development of computer hardware
Computer Systems	describe the functions of BIOSes and operating systems, and how they interact with each other and with computer hardware
Electronics Robotics and Computer Interfacing	describe the function of electronic components and the use of these components in control systems and other circuits, and calculate values for circuit components
Networking	describe network concepts, services, and security
Data Representation and Digital Logic	demonstrate an understanding of the use of binary numbers, hexadecimal numbers, and Boolean algebra in computer logic and data processing

COMPUTER TECHNOLOGY SKILLS	
UNIT	Expectation
Hardware Solutions	build, configure, and maintain a computer system, and connect peripheral devices
Computer Systems	set up, optimize, and back up a computer system
Electronics Robotics and	design, install, configure, test, and troubleshoot networks

Computer Interfacing	
Networking setup and management	design, install, configure, test, and troubleshoot networks
Computer Programming	demonstrate an understanding of fundamental programming concepts, and develop a program that interacts with an external device.

TECHNOLOGY, THE ENVIRONMENT, AND SOCIETY	
UNIT	Expectation
Technology and the environment	describe environmental issues related to the widespread use of computers and associated technologies.
Technology and Society	describe societal issues related to the widespread use of computers and associated technologies

PROFESSIONAL PRACTICE AND CAREER OPPORTUNITIES	
UNIT	Expectation
Health and Safety	demonstrate an understanding of relevant safety practices, standards, and legislation
Ethics and Security	describe ethical and security issues related to the use of computers;
Career Opportunities	describe various careers related to computer technology and electronics, and the entry requirements for these careers

C. **CLASSROOM ROUTINES & PROCEDURES**

1. Students must be in class at the start of each period, prepared to begin before the bell rings. Regular attendance and punctuality is a must. Get into the habit of writing down homework into your student planner. Prepare for each class by reading and doing the homework assigned by the teacher. Students are responsible for catching up on missed homework and in-class assignments. The student can expect up to six hours of homework and review in each 5-day school cycle. Additional time may be required as a result of the student's own challenges and ability to complete assignments.

2. All work submitted to the instructor shall be original work from the student. Plagiarism will immediately receive a zero and referred to the vice-principal.

3. Students will be evaluated on all course expectations. See the bottom of this page for an example of the evaluation criteria.

4. There will be three formal reporting periods. The Interim, Mid-term and Final reports will be distributed according to administration (only the last two reports will receive a numerical grade.) The Student mark is a cumulative mark representing the standing of the student at the end of the reporting period. Comments will be made around student performance, learning skills, attendance and lates.

5. If a student must be away, he or she must arrange to write the test in advance. Documented explanations will be given due consideration for missed tests. It is ESSENTIAL that you communicate with the teacher prior to the test that you will be away. Arrangements will be made to write the test at a mutually agreeable time.

6. Assignments are due at the beginning of the class on the due date, all assignments handed in past the ultimate due date (the last date the assignment will be accepted) will no longer be accepted.

7. A final exam (120 minutes) will be a required component of this course. It will be worth 20% of the course mark

D. OVERALL EVALUATION OUTLINE

Tests / Quizzes	30%
Assignments	30%
ISU	10%
Culminating	10%
Final Exam	20%

Learning Skills

Student Learning Skills will also be monitored and evaluated throughout the year. The report card provides a record of the learning skills demonstrated by the student in the following five categories: **Responsibility, Organization, Work Independent, Collaboration, Initiative and Self-regulation**. These learning skills are evaluated using the following four point scale: (E) Excellent, (G) Good, (S) Satisfactory, (N) Needs Improvement.

Learning Skills and Work Habits	Sample Behaviours. The Student:
Responsibility	• fulfils responsibilities and commitments within the learning environment; • completes and submits class work, homework, and assignments according to agreed-upon timelines; • takes responsibility for and manages own behaviour.
Organization	• devises and follows a plan and process for completing work and tasks; • establishes priorities and manages time to complete tasks and achieve goals; • identifies, gathers, evaluates, and uses information, technology, and resources to complete tasks.
Independent Work	• independently monitors, assesses, and revises plans to complete tasks and meet goals; • uses class time appropriately to complete tasks; • follows instructions with minimal supervision.
Collaboration	• accepts various roles and an equitable share of work in a group; • responds positively to the ideas, opinions, values, and traditions of others; • builds healthy peer-to-peer relationships through personal and media-assisted interactions; • works with others to resolve conflicts and build consensus to achieve group goals; • shares information, resources, and expertise and promotes critical thinking to solve problems and make decisions.
Initiative	• looks for and acts on new ideas and opportunities for learning; • demonstrates the capacity for innovation and a willingness to take risks; • demonstrates curiosity and interest in learning; • approaches new tasks with a positive attitude; • recognizes and advocates appropriately for the rights of self and others.
Self-regulation	• sets own individual goals and monitors progress towards achieving them; • seeks clarification or assistance when needed; • assesses and reflects critically on own strengths, needs, and interests; • identifies learning opportunities, choices, and strategies to meet personal needs and achieve goals; • perseveres and makes an effort when responding to challenges.