COMM 1245	Technical Communications I This course introduces students to the writing, oral presentation, critical thinking and interpersonal communications skills required of technical professionals in the workplace. The fundamentals of clear, concise writing and presenting will be reviewed and refined. Experience will be gained in organizing, writing and presenting technical information. In addition, career development skills and portfolio preparation will be discussed. There will be several opportunities, through assignments and lab work, to develop portfolio components. Students will learn how to collect appropriate work samples and documentation from other courses in the program as well as from other sources.
COMM 2245	Technical Communications II This course focuses on the interpersonal, written and oral technical communication skills necessary for working independently and as part of a team in a technical environment. Further skill development in written forms of technical documentation required for the workplace as well as report creation and oral presentation skills will continue to be emphasized. Team building principles, group dynamics and collaborative writing will be discussed. Students will participate in meetings and take responsibilities in a group project from its inception to completion and evaluation. Students will continue to enhance and apply their research skills and project management principles will also be introduced. Successful job interviews and the portfolio will be discussed.
EETD 1004	Electronic Drafting This course is an introduction to computer-aided design and drafting (CADD) techniques used in the field of electronics. The learner will develop CADD skills in the preparation of engineering drawings using desktop electronic drafting software.
EETD 1017	Work Experience I This contact training work experience is intended to expose the learner to their chosen career field of electronics. The learner will have the opportunity to apply, learn and enhance their skills and knowledge in an electronics environment, experience new applications and processes, develop their abilities in the areas of working life regarding personal growth and enrichment, and demonstrate employability skills.
EETD 1031	Analog/Digital Communications This course is an introduction to Analog/Digital Communications, and is offered in the second year of the Electronic Engineering Technician program. The course covers the theories of AM/FM communications, Digital communications, Fibre-Optics transmission and Telephone communications. System concepts are explored rather than discrete components, since a variety of electronic components are used, hence the prerequisites. The theories and practices are confirmed and enhanced by performing laboratory experiments, utilization of electronic communication system trainers and test equipment develop troubleshooting skills.
EETD 1051	DC Circuits for Technologies This course covers the theories of resistance, voltage and current associated with series/parallel resistive direct current (DC) circuits. Working safely with various direct current sources and the proper operation of measuring test equipment is emphasized. These theories and practices are confirmed and enhanced by performing laboratory experiments and utilization of electronic test equipment.

EETD 1053	Digital Logic I This course introduces the learner to the basic digital logic concepts necessary to attain a working knowledge of Medium Scale Integration (MSI) chips, the theoretical mathematical component required to design standard, combinatorial digital circuits and the variety of test equipment required for troubleshooting digital logic systems with schematics. The learner will be required to complete laboratory experiments both on the bench and via EDA software to meet to learning outcomes for each section.
EETD 1054	Electronic Fabrication and Soldering This course provides an introduction to high-reliability soldering techniques and proper selection and use of standard electronic hardware, wiring used in the field of electronics. This course is intended to develop knowledge and hands-on skill training in the process of developing reliable electronic assemblies with high-reliability practices used on printed circuit board assemblies using through hole mounted (THM) and surface mounted (SMT) components and devices.
EETD 2000	AC Circuits for Technologies This course covers the theories of alternating current circuits. Working safely with various voltage and current sources and the proper operation of test equipment is emphasized. These theories and practices are confirmed and enhanced by performing laboratory experiments.
EETD 2002	Digital Logic II This course introduces the learner to the digital logic concepts necessary to attain a working knowledge of Large Scale Integrated (LSI) and Very Large Scale Integration (VLSI) integrated circuits. These concepts prepare the learner for the Microcontroller and Programmable Logic Controller sections of the Electronic Engineering Technician program. The learner will be required to complete laboratory experiments both on the bench and via EDA software to meet the learning outcomes.
EETD 2003	Introduction to Computer Hardware and Network Devices The basic structure of a desktop computer is the foundation of a wide variety of electronic systems, from tiny microcontrollers to factory floor automation systems. This course introduces the basic computer architecture on which later courses will build. It also introduces the basic concepts that underpin digital networks.
EETD 2004	Semiconductor Circuits I This course is an introduction to semiconductor devices such as rectifier diodes, Zener diodes, light-emitting diodes, thyristors and bipolar junction transistors. The operation and characteristics of power supply circuits, diode wave-shaping circuits and small signal amplifier circuits are studied and verified in the lab using standard test equipment and/or simulation software.
EETD 3000	Semiconductor Circuits II This course covers Class A, B, C and D amplifiers, FET applications and frequency effects on amplifier circuits. Learners will have the opportunity to analyze and troubleshoot circuits in a lab environment using test equipment and/or simulation software.

EETD 4000	Electric Machines I The characteristics and applications of DC motors and generators, AC motors and generators are studied in this course. Three-phase circuits and magnetic circuits are covered in order to understand the operation of motors and generators.
EETD 4001	Microcontroller Programming The goal of this course is to provide a basic understanding of microcontroller programming using a high-level programming language.
EETD 4002	Semiconductor Circuits III Differential amplifier, operational amplifier, multivibrator, phase-locked loop, discrete and IC switching regulators, oscillator and active filter circuits are studied. Emphasis is place on integrated circuit characteristics, selection and applications, both in theory and in the laboratory portion.
EETD 4003	Programmable Logic Controller Fundamentals Learners will have the opportunity to build a working knowledge of Programmable Logic Controller (PLCs) by connecting I/O and developing programs that can perform simple logic decisions as well as timing and counting in the control of industrial processes.
EETD 5000	Microcontroller Applications This course provides a basic understanding of fundamental electronics and system integration to enable the learner to effectively identify domains microcontroller systems are found in robotics, avionics, motor control, environmental systems. Consultation with manufacturers' datasheets will be vital in accomplishing application tasks.
EETD 5001	Business, Technology and Modern Society The course introduces the learner to fundamental business concepts and explores the impact of advancing technology and organizations on the environment, ethics and society. Applicable codes are introduced to the learner.
MATH 1060	Applied Math I for Technicians This course provides learners with a basic understanding of applied mathematical principles for use by technicians. Applied Math l is designed to cover basic algebra, geometry, functional notation, linear equations, quadratic equations, exponents, logarithms, analytic geometry and systems of equations. The use of computer software as a mathematical tool will be explored. Learners will be encouraged to maintain a math journal that may become part of their personal College portfolio.
MATH 1066	Applied Math II for Technicians This course builds on the skills and knowledge learned from Applied Math l (MATH 1060) broadening the understanding of applied mathematical principles for use by technicians. Applied Math ll is designed to cover trigonometric functions, complex numbers, analytic geometry and systems of equations. The use of computer software as a mathematical tool will be used. Learners will be encouraged to maintain a math journal that may become part of their personal College portfolio.

SAFE 1000	Introduction to WHMIS (Workplace Hazardous Materials Information Systems) This course offers learners basic overview of WHMIS principles and establishes a solid foundation to support workplace-specific training on the safe storage and handling of controlled/hazardous products. Upon successful completion of the course, students receive basic WHMIS certification.
SAFE 1001	Introduction to NS OH&S Act This course offers students an introduction to the Occupational Health & Safety (OH&S) Act of Nova Scotia, which is required by any person employed in a Nova Scotia workplace. This is a generic, introductory course that provides basic knowledge of the Act for students and is considered to be the basis from which more specific training can be given.
SAFE 1021	Introduction to Hazard Identification The learners are introduced to the types of hazards encountered in workplaces and the approach that should be followed when recommending and implementing appropriate controls. Two key elements of Hazard Identification are addressed: Hazard Assessment and Inspection. The Nova Scotia Occupational Health and Safety Act is discussed. The course material is to be infused throughout the curriculum and may be delivered in the classroom, shop or other opportunity as designed and developed by the instructor.
SAFE 1023	Introduction to Lock Out/Tag Out Lock-out Tag Out introduces the learner to the hazards related to energized systems and procedures to ensure worker safety. Related legislation and risk management is discussed and the learner is exposed to the various types of lock-out devices. The course material is to be infused throughout the curriculum and may be delivered in the classroom, shop or other opportunity as designed and developed by the instructor.
SAFE 1024	Introduction to Respiratory Protection The learner is introduced to the potential of atmospheric hazards in the workplace and the available personal protection and control methods to maintain a safe work environment. Discussion includes identification and testing for atmospheric hazards and workplace respiratory programs. The learner will be given the opportunity to select, use and maintain respiratory equipment. The course material is to be infused throughout the curriculum and may be delivered in the classroom, shop or other opportunity as designed and developed by the instructor.

EETD 5109

Automated test Equipment

This is a one-semester course providing learners with an introduction in automated testing of electronic circuits. In order to accomplish this, learners are introduced to the LabVlEW programming environment. Learners will program bench top instruments to take measurements and record results on the electronic circuit under study. Emphasis is given to the hands-on approach to learning. The time allotted to this course is four (4) hours per week. Generally, concepts learned during class time will be demonstrated and reinforced with lab exercises. Learners will also complete programming assignments that will apply the concepts learned.

EETD 5105

Capstone Project for Electronics Engineering Technicians

This project highlights the importance of teamwork and the reliance of each other in the completion of various tasks. This course integrates electronic components and principles from throughout the program and requires the participants to utilize a variety of electronic principals to accomplish a sophisticated project from conception through to prototype board wiring and troubleshooting.

ENGI 1011

Residential Electronics

The course introduces the learner to the fundamentals of electronics in the modern home. From security, lighting, communication, entertainment and home automation, todays home owners are requiring more and more technology available to them within their residential environment. This course will investigate new trends and equipment available on today's market and learners will use these influences to design a Home Automation package applicable to a residential setting.