# Subject Table Handbook Technology Education

Student Records System and Professional School Personnel System

September 2016-August 2017



## SUBJECT TABLE HANDBOOK TECHNOLOGY EDUCATION

Student Records System and Professional School Personnel System

Effective September 1, 2016 to August 31, 2017

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Manitoba Education and Training

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# **INTRODUCTION**

## PURPOSE

The purpose of the *Subject Table Handbook: Technology Education* is to support schools in the 2016-2017 school year by:

- providing basic information to assist schools in completing the Professional School Personnel system (PSP) forms
- providing basic information to schools for entering student records into the Student Records system (SRS)
- providing subject computer codes for courses developed by Education and Training and for those approved or registered by the Department

A new edition of the *Subject Table Handbook* is provided at the beginning of each school year. It reflects changes to course codes, credits, etc. that apply for the upcoming school year. Schools are responsible for ensuring that they are using the appropriate edition of the Handbook when recording student marks for Professional Certification and Student Records Unit in Russell, Manitoba. Note that schools must use the September 2015-June 2016 Subject Table Handbook for reporting 2015-2016 student marks in the summer and fall of 2016.

This edition of the *Subject Table Handbook: Technology Education* is in effect from September 1, 2016 to August 31, 2017 and is available online at <u>http://www.edu.gov.mb.ca/k12/docs/policy/sthte/index.html</u>. Placing the Handbook online provides information about course codes, levels, and credits to accommodate schools in setting up their registrations and course offerings for the next school year. The online content will be updated several times during the year, but schools should exercise some caution when setting up their course codes.

## SENIOR YEARS CREDIT SYSTEM

The Senior Years (Grade 9 to Grade 12) credit system provides flexibility to enable students to pursue Senior Years courses best suited to their individual requirements and aspirations. Students may earn *one credit* by undertaking and successfully completing a course of study designed for a minimum of 110 hours of instruction. *Half credits* (courses designed for a minimum of 55 hours of instruction) may be earned in like manner. There are two categories of credits: Compulsory and Optional.

## SENIOR YEARS COURSE IDENTIFICATION

## **Course Numbering**

The present course numbering system comprises a 3-character, alpha-numeric code. The first and second characters are numerals, while the third is a letter.

## **First Character**

- 1 for courses developed for Grade 9
- 2 for courses developed for Grade 10
- 3 for courses developed for Grade 11
- 4 for courses developed for Grade 12

## Second Character

- 0 developed by Education and Training for 1 credit
- 5 developed by Education and Training for <sup>1</sup>/<sub>2</sub> credit
- 1 developed by schools or school divisions and registered by Education and Training
- 2 externally developed by an educational authority and, in the case of dual credit, post-secondary institution (e.g., university, out-of-country).

## **Third Character**

Third Character	
	eneral
	undation
	ecialized
E - EA	
	odified dividualized
	ollege-based
	niversity-based
0 - 01	nversity-based
<u>Course Designations</u> Foundation (F):	Educational experiences which are broadly based and appropriate for all students and which may lead to further studies beyond the Senior Years (e.g. apprenticeship, college, and university).
General (G):	General educational experiences for all students. Industrial Arts and Home Economics courses may be identified as General (G) or Specialized (S) at the Grade 11 and Grade 12 levels.
Specialized (S):	Educational experiences in specialized areas leading to further studies beyond the Senior Years (e.g., apprenticeship, college or university). Business Education and Marketing Education courses at Grade 10-12 and Vocational Industrial courses at Grade 9-12 are designated as Specialized.
EAL (E):	Educational experiences designed to focus on English as an Additional Language (EAL) learning goals in the context of the subject, based on the student's assessed level of EAL proficiency, and to assist the student in making the transition into regular Senior Years programming in this content area. An EAL Individual Educational Plan (EAL-IEP) is required for each student.
Modified (M):	Educational experiences intended for students with significant cognitive disabilities and where the provincial subject area curriculum outcomes have been modified to take into account the learning requirements of a student; an Individual Education Plan (IEP) is required for each student.
Individualized (I):	Educational experiences intended for students with significant cognitive disabilities and that are developmentally and age appropriate and highly individualized to take into account the learning requirements of the student; an Individual Education Plan (IEP) is required for each student.
	<b>NOTE:</b> Students in individualized programming do not use Education and Training. The designation indicates student participation in individualized programming. For example, 111 indicates year one of student participation in locally developed programming individualized for the student; 711 indicates year seven of such participation.
College-based (C):	Educational experiences at the college level that can be used for dual credits; credit at the Grade 11 and Grade 12 levels and also for the first year of college.

- **University-based (U):** Educational experiences at the first year university level that can be used for dual credits (credit at the Grade 12 level) for senior years graduation purposes and also for first year university.
- Partnerships:Some Technical Vocational Programs may be offered in partnership with<br/>post-secondary institution. Schools are required to request approval from<br/>Manitoba Education and Training to ensure proper course codes,<br/>agreements, and teaching credentials are in place.

## **Course Levels**

- **Grade 9:** All subject area curricula, except technical vocational, will be developed as foundation courses. Some technology education curricula may be developed as specialized courses. The Foundation (F) course designation will replace the General (G) course designation as new curricula come into effect.
- **Grade 10:** As new curricula are introduced, all subject area curricula, except technical vocational, and mathematics, will be developed as Foundation (F) courses. Some curricula for technology education, and mathematics may be developed as Specialized (S) courses.
- **Grade 11:** As new curricula are introduced, a variety of subject area curricula will be developed for different purposes, including a range of Foundation (F) and Specialized (S) courses.
- **Grade 12:** As new curricula are introduced, a variety of subject area curricula will be developed for different purposes, including a range of Foundation (F), and Specialized (S) courses. Courses that qualify for a U designation are first year University Courses. Those that qualify for a C designation are first year College courses.

**NOTE:** From Grades 9 - 12, a particular Foundation, General and/or Specialized subject area curriculum can be altered on an individual basis via a student's Individual Education Plan following Departmental requirements. The E or M course designation then applies.

No Departmental regulation will prevent a student from taking a designated course in one senior year and then switching to a different designation in a later year. For example, a student who receives an M designation for Grade 9 Family Studies (10M) could subsequently take Grade 10 Family Studies (20F). Similarly, a student receiving an E designation for Grade 10 Applied Horticulture (30E) could subsequently take Grade 11 Advanced Horticulture (40S).

## **Examples**:

Grade 9 Intro to Electronics (10S)	Grade 9, developed or approved by Education and Training for 1 credit, Specialized course.
Grade 9 Introduction to Technical Vocationa	<b>l</b> (15S) Grade 9, developed or approved by Education and Training for <sup>1</sup> / <sub>2</sub> credit, Specialized course.

Grade 9 Family Studies (15M)	Grade 9, developed or approved by Education and Training for ½ credit, General course modified in curriculum goals and objectives or outcomes to accommodate a student with significant cognitive disabilities according to the Individual Education Plan (IEP).
Grade 10 Family Studies (25G)	Grade 10, developed or approved by Education and Training for <sup>1</sup> / <sub>2</sub> credit, General course.
Grade 11 Machine Tool Technology (30G)	Grade 11, developed or approved by Education and Training for 1 credit, General course.
Calculus (1103/4) (42C)	Grade 12, a first year college level course for dual credits, developed by a college and approved by Education and Training for one- half credit, College-based course.
Introduction to Sociology (077.120) (42U)	Grade 12, a first year university level course for dual credits, developed by a university and approved by Education and Training for one credit, University-based course.

## **CHALLENGE FOR CREDIT**

The Challenge for Credit Option offers students the opportunity to apply prior knowledge in a particular subject area by demonstrating achievement in the learning outcomes of that course/speciality and receiving credit for it. For information on *The Challenge for Credit Option* refer to www.edu.gov.mb.ca/k12/policy/gradreq/docs/choice\_attacha.pdf

## CREDIT FOR COMMUNITY SERVICE (STUDENT-INITIATED PROJECT - SIP)

Students may earn one Community Service credit (in the form of a SIP) within the 30 credits for graduation. These SIPs consisting of volunteer service are not to be registered with the Department. A Community Service SIP course code (8977) is available. Guidelines for this SIP are available at <a href="http://www.edu.gov.mb.ca/k12/policy/gradreq/docs/choice\_attachb.pdf">http://www.edu.gov.mb.ca/k12/policy/gradreq/docs/choice\_attachb.pdf</a>

## DISTANCE LEARNING COURSES

Students may take compulsory or optional courses in either print or online format including courses delivered from outside the province. Additional information on distance learning policy is available at <u>http://www.edu.gov.mb.ca/k12/docs/policy/online\_learning</u> **In-province Courses:** The course codes for in-province compulsory and optional distance learning courses that are based on Education and Training curricula are the same codes that are used for in-class instruction e.g. 0092 ELA: A Comprehensive Focus 40S. **Out-of-province Courses:** For distance learning courses delivered by an out-of-province educational authority see http://www.edu.gov.mb.ca/k12/docs/policy/op\_credits/index.html.

## POST-SECONDARY CREDITS AND SENIOR YEARS - DUAL CREDITS

Senior years students may take college and university courses for Senior Years graduation credits, for example, Introduction to Sociology (university course) and Safety in the Workplace (college course). The student receives a high school credit as well as a university/college credit. Students can earn a maximum of five (5) dual credits. The decision to participate is a school/school division

decision. Funding of post-secondary and dual credits is also a local matter. Guidelines are available at <a href="http://www.edu.gov.mb.ca/k12/policy/gradreq/docs/dc\_guide\_10.pdf">www.edu.gov.mb.ca/k12/policy/gradreq/docs/dc\_guide\_10.pdf</a>

## SCHOOL-INITIATED COURSES (SICs) AND STUDENT-INITIATED PROJECTS (SIPs)

School-Initiated Courses (SICs) and Student-Initiated Projects (SIPs) information is available at <u>http://www.edu.gov.mb.ca/k12/docs/support/ldc/</u> and provides the most current information on registration procedures.

## SPECIAL LANGUAGE CREDIT OPTION

This credit option provides for the recognition of Manitoba's linguistic diversity. Students proficient in languages other than English or French are eligible. Only one special language credit may be earned at each of the Senior Years. Student marks can be reported as a percentage mark, however, "S" for "Standing" may be used for granting additional/prior credit(s). For further information refer to <u>http://www.edu.gov.mb.ca/k12/docs/policy/lancredits/index.html</u>.

## SUBSTITUTION OF CREDITS IN EXCEPTIONAL CIRCUMSTANCES

In exceptional circumstances, and in discussion with parents, a school administrator may approve the substitution of an optional course for a compulsory course. Substitution of credit is permitted for any compulsory subject. School divisions/schools can decide whether to allow substitution of credits. A maximum of two substitute credits may be used toward high school graduation. If a course is substituted for another, the school must report the substitution to Student Records and note the substitution on the student's transcript. See

http://www.edu.gov.mb.ca/k12/policy/gradreq/docs/substituion\_credits.pdf.

For example, A 40 level math course is required for graduation. If a student did not complete a 40 level math course, the school principal may substitute another course as credit toward graduation, such as Biology 40S substituted for Applied Math 40S. The student's mark for Biology 40S would appear on the student's transcript with a note that Biology 40S has been substituted for Applied Math 40S. The student also be reported to Student Records and the school principal would submit a *Substitution of Credit* form to Student Records. The form would indicate that the student had completed Biology 40S as a substitution for Applied Math 40S.

## **TECHNOLOGY EDUCATION – PROGRAM GROUPINGS**

The *Subject Table Handbook: Technology Education* divides available courses into the following **groups**. Each program group may be eligible for program cluster funding, and each course or unit in the cluster may be eligible for unit-credit funding, as outlined in the Funding of Schools document. Please see listings of groups, program clusters, and unit-credit titles starting on page ix.

## **Technical Vocational**

The implementation model for technical-vocational education provides for nine credits from Grades 9 to 12. The Grade 9 credit is optional, depending on local school resources. The eight courses developed from Grades 10 to 12 form the foundation courses within the specific cluster. School divisions/districts are eligible for a categorical grant of \$5,500 per approved Senior Years Technology Education Program. School divisions/districts are eligible for unit-credit support based on approved courses within Category I (\$165.00 per pupil credit) and Category II (\$55.00 per pupil credit).See Appendix A.

## **Exploration Credit**

New to Technical Vocational Education is the "Exploration of Technical Vocational Education" optional course. It can be used as a part of one or more TVE clusters, to allow students in grade 9 to explore one or more skilled trade areas available in a school.

#### **High School Apprenticeship Program**

The High School Apprenticeship Program (HSAP) falls within the Senior Years Technology Education Program. In Manitoba, apprenticeship training, including HSAP, is administered by Apprenticeship Manitoba. Apprenticeship is a training relationship involving a trainee (known as an apprentice), an employer, and Apprenticeship Manitoba. An employer hires an apprentice to meet an existing or projected skill need. A contractual arrangement, known as entrepreneurship, is established among the employer, the apprentice, and Apprenticeship Manitoba. Students can receive up to eight credits from HSAP towards graduation. See Appendix B.

#### **Industrial Arts**

The Senior Years curricula for Industrial Arts were originally prepared for Grades 10 to 12. The structure of Grades 9 to 12 resulted in the re-designation of Industrial Arts 101, 201, and 301 curricula as Grades 10, 11, and 12 respectively. Half-credit versions of the Grade 9 and Grade 10 curricula have been identified for those schools that prefer to provide half-credits. Grade 9 programming is derived from the existing middle years/junior high curriculum for Grade 9. New course titles have been identified for the Industrial Arts unit-credits. Details concerning the categories of clusters are found in Appendix C.

#### **Home Economics**

Home Economics for the Senior Years includes curricula that were originally prepared for Grades 9 to 12. Half-credit versions of the Grade 9 and 10 curricula have been identified for those schools that prefer to provide half-credits. Human Ecology courses are eligible for unit-credit funding. Details are found in Appendix D.

## **Business Education and Marketing Education**

For Categorical Grant purposes, a series of at least eight Business Education and Marketing Education courses are selected. A marketing course grouping contains the five Marketing courses and at least three Business Education courses. Note that a selection of Department-developed Computer courses can also be used to satisfy the course requirement for Categorical Grant purposes. Business Education and Marketing Education unit-credit titles are **not** part of the unit-credit support. See Appendix E.

## PROGRAM AND UNIT-CREDIT CATEGORIES

The program and unit-credit categories are listed under each program group and list category titles for each program cluster of courses. This is a method for categorizing the programs and unit-credit titles that is linked to the appropriate categorical funding. For more information on the criteria required for categorical program funding and unit-credit funding please see <a href="http://www.edu.gov.mb.ca/k12/finance/schfund/funding\_16-17.pdf">http://www.edu.gov.mb.ca/k12/finance/schfund/funding\_16-17.pdf</a>.

## <u>Appendix A</u>: Technical Vocational Programs

(This group may be eligible for program and unit-credit funding. Please see individual programs listed in this handbook for course codes and the unit-credit titles for each course in these programs).

#### **Category**

<u>Category</u>	
Ι	Aircraft Maintenance Technology
Ι	Automotive Technology (previously Power Mechanics)
Ι	Aviation and Aerospace Technologies (previously Metals and Aerospace Technologies)
Ι	Baking and Pastry Arts
Ι	Broadcast Media Technology (previously Radio and Television Broadcasting, and
	Electronic Communications)
Ι	Cabinet and Furniture Making
Ι	Carpentry (previously Building Construction)
Ι	Child Care
Ι	Collision Repair and Refinishing Technology (previously Auto Body Repair)
Ι	Culinary Arts (previously Food Services)
Ι	Dental Assisting
Ι	Dental Technology
II	Design Drafting (previously Drafting)
Ι	Electrical Trades Technology (previously Electricity)
Ι	Electronics Technology (previously Electronics)
I	Nail Technology (should include Skin Care Technology for Esthetics)
II	Fashion Technology and Design
I	Graphic Design (previously Advertising Art and Production Art)
I	Hairstyling
II	Health Care Assistant
I	Heavy Duty Equipment Technician (previously Heavy Duty Mechanics)
I	Horticulture (previously Horticulture and Landscaping)
II	Hotel Hospitality
I	Industrial Electronics (MITT only)
I	Information Science (SRSS only)
I	Interactive Digital Media (previously Microcomputer Systems Technology)
I	Jewellery and Metalsmithing (previously Jewellery Arts) Machining Technology (previously Machine Shop)
I I	
I	Mining Engineering Technology (previously Mineral Science) Nail Technology (should include Skin Care Technology for Esthetics)
I	Network Cyber Security (previously Microcomputer Systems Technology)
I	Photography
I	Plumbing and Pipe Trades
I	Print Media (previously Graphic Arts)
I	Refrigeration and Air Conditioning
I	Resources and Environmental Management
I	Skin Care Technology (should include Nail Technology for Esthetics)
I	Sound Engineering (previously Audio Recording Production and Performance)
I	Sustainable Energy
I	Welding Technology (previously Welding)
*	Exploration of Technical Vocational Education (previously Intro. to Light Industrial
	Tech., Intro. to Heavy Industrial Tech., and Intro. to Human Services Tech.).

<u>Appendix B</u> :	High School Apprenticeship Program – See page 1 for codes.
	(This group is eligible for unit credit funding only)

Category II

<u>Appendix C</u> :	Industrial Arts (This group is eligible for unit-credit funding only)				
Category I					
Code	Unit-Credit Title	Course	Numb	oer	
7959	Graphic Communication Technology	15G	25G		
7958	Graphic Communication Technology	10G	20G	30G 30S	40G 40S
7973	Electricity/Electronics Technology	15G	25G		
7974	Electricity/Electronics Technology	10G	20G	30G 30S	40G 40S
7965	Power Mechanics Technology	10G	20G	30G 30S	40G 40S
7966	Power Mechanics Technology	15G	25G		
7965	Power Mechanics Technology	10G	20G	30G 30S	40G 40S
7981	Metalwork Technology	15G	25G		
7980	Metal work Technology	10G	20G	30G 30S	40G 40S
7991	Woodwork Technology	15G	25G		
7990	Woodwork Technology	10G	20G	30G 30S	40G 40S
7994	Construction Technology			40G	40S
7995	Furniture Design Technology			40G	40S
7996	Manufacturing Technology			40G	40S
7997	Applied Technology (Graphics, Electronics, Power Mech., Metalwork, Woodwork)				40S
Category II:					
Code	Unit-Credit Title	Course		oer	
7952	Drafting Design Technology	15G	25G		
7953	Drafting Design Technology	10G	20G	30G 30S	40G 40S
7997	Applied Technology (Drafting)				40S
<u>Appendix D:</u>	Human Ecology - Home Economics				

(This group of courses are eligible for unit-credit funding only)

Category II								
Code	Unit-Credit Title	Course Nu			Unit-Credit Title Course Number			•
1118	Family Studies 10F 20F		0F	30F	40F			
				30S	40S			
0485	Family Studies	15F 2	25F					
1109	Clothing, Housing, and Design	10G 2	20G	30G	40G			
				30S	40S			
0483	Clothing, Housing, and Design	15G 2	25G					
1119	Food and Nutrition	10G 2	20G	30G	40G			
				30S	40S			
0484	Food and Nutrition	15G 2	25G					
0482	Home Economics	10G 1	5G	20G	25G			
				30G	40G			

## <u>Appendix E</u>: Business and Marketing – See page 1 for codes.

(This group is eligible for program funding only)

# GRADUATION REQUIREMENTS FOR THE SENIOR YEARS TECHNOLOGY EDUCATION PROGRAM

To receive a Senior Years Technical Education diploma, a student must complete eight departmentally developed courses from an approved technical-vocational cluster, together with 16 compulsory credits and six optional credits. A Grade 11 Social Studies credit is not compulsory for Technology Education Program graduation.

Diploma Requirements	Credits Required for Graduation
Compulsory Credits	16
English Language Arts (1 credit per grade)	4
Mathematics (1 credit per grade)	4
Physical Education/Health Education (1 credit per grade)	4
Social Studies (1 credit in each of Grades 9 and 10)	2
Science (1 credit in each of Grades 9 and 10)	2
Approved Cluster of Compulsory Technology Education Credits	8 to 12
Optional Credits	0 to 6
Totals	30

Please see http://www.edu.gov.mb.ca/k12/policy/gradreq/docs/grad\_req\_te.pdf for more information.

## CONTACT INFORMATION

Should you require clarification regarding Senior Years Technology Education curricula, program, or policy issues, please contact:

Kim Poirier Instruction, Curriculum and Assessment Branch 1567 Dublin Avenue Winnipeg, Manitoba R3E 3J5 Telephone 204-945-7947 or Toll free 1-800-282-8069 (Ext. 7947) Fax 204-945-1704 Email <u>kim.poirier@gov.mb.ca</u>

For clarification regarding technical information, please contact:

Help Desk (EIS Collection) Telephone 204-926-3443 or Toll free 1-877-926-3443 Email <u>AppSupportEISCOLL2@gov.mb.ca</u>

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Code Description

Credits Grade/Level

30S 30E 30M

## TECHNOLOGY EDUCATION HIGH SCHOOL APPRENTICESHIP PROGRAM

#### HIGH SCHOOL APPRENTICESHIP PROGRAM

9801	HIGH	SCHOOL	APPRENTICESHIP	PROGRAM	1	1.0	40S	40E	40M
9802	HIGH	SCHOOL	APPRENTICESHIP	PROGRAM	2	1.0	40S	40E	40M
9803	HIGH	SCHOOL	APPRENTICESHIP	PROGRAM	3	1.0	40S	40E	40M
9804	HIGH	SCHOOL	APPRENTICESHIP	PROGRAM	4	1.0	40S	40E	40M
9805	HIGH	SCHOOL	APPRENTICESHIP	PROGRAM	5	1.0	40S	40E	40M
9806	HIGH	SCHOOL	APPRENTICESHIP	PROGRAM	6	1.0	40S	40E	40M
9807	HIGH	SCHOOL	APPRENTICESHIP	PROGRAM	7	1.0	40S	40E	40M
9808	HIGH	SCHOOL	APPRENTICESHIP	PROGRAM	8	1.0	40S	40E	40M

## TECHNOLOGY EDUCATION BUSINESS EDUCATION AND MARKETING EDUCATION

0200 ACCOUNTING PRINCIPLES 1.0

Note: Effective the 2015-2016 school year, Accounting Principles 30S, 30E, 30M can no longer be reported as a mathematics credit to satisfy the Grade 11 compulsory credit requirement for graduation.

0360	ECONOMICS	1.0	40S	40E	40M			
0690	SEMINAR IN BUSINESS	1.0	40S	40E	40M			
0820	SHORTHAND & TRANSCRIPTION	1.0	30S	30E	30M	40S	40E	40M
1224	FUTURES IN BUSINESS	.5	15G	15E	15M			
1225	START YOUR OWN BUSINESS	.5	25G	25E	25M			
1227	ACCOUNTING SYSTEMS	1.0	40S	40E	40M			

Note: Effective the 2016-2017 school year, Accounting Systems 40S, 40E, 40M can no longer be reported as a mathematics credit to satisfy the Grade 12 compulsory credit requirement for graduation.

1251	MANAGEMENT	1.0	40S	40E	40M
1252	MARKETING PRACTICUM	1.0	40S	40E	40M
1265	PROMOTIONS	1.0	30S	30E	30M
1272	RELATIONS IN BUSINESS	1.0	30S	30E	30M
1273	RETAILING	1.0	20S	20E	20M
1274	AUTOMATED OFFICE	1.0	40S	40E	40M
1277	VISIONS AND VENTURES: ENTREPRENEURSHIP	1.0	30S	30E	30M

The following may be used to fulfill the minimum 8 credit requirement for an approved Business Ed or Marketing Ed cluster: 0217 Applying Info & Comm Tech I, 0218 Applying Info & Communication Tech II, 0235 Data Collection & Analysis, 0223 Desktop Publishing, 0225 Interactive Websites, 0222 Print Communications, 0221 Relational Databases, 0234 Web Design, and 1270 Keyboarding.

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## Code Description

Credits Grade/Level

## **TECHNOLOGY EDUCATION HOME ECONOMICS**

0482	HOME ECONOMICS	.5	15G	15E	15M	25G	25E	25M		
		1.0	10G	10E	10M	20G	20E	20M	30G	30E
			30M	40G	40E	40M				
0483	CLOTHING/HOUSING/DESIGN	.5	15G	15E	15M	25G	25E	25M		
0484	FOOD AND NUTRITION	.5	15G	15E	15M	25G	25E	25M		
0485	FAMILY STUDIES	.5	15F	15E	15M	25E	25M	25F		
1109	CLOTHING/HOUSING/DESIGN	1.0	10G	10E	10M	20G	20E	20M	30S	30G
			30E	30M	40S	40G	40E	40M		
1118	FAMILY STUDIES	1.0	10F	10E	10M	20F	20E	20M	30S	30E
			30M	40S	40E	40M				
1119	FOOD AND NUTRITION	1.0	10G	10E	10M	20G	20E	20M	30S	30G
			30E	30M	40S	40G	40E	40M		

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Code Description Credits Grade/Level **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL** BROADCAST MEDIA TECHNOLOGY/ELECTRONIC COMMUNICATIONS 8475 \*INTRO TO ELECTRONIC COMMUNICATION 1.0 10S 10E 10M 8476 \*INTRO TO ELECTRONIC COMMUNICATION .5 15S 15E 15M Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017. 8477 ELEMENTS OF BROADCASTING 1.0 20S 20E 20M 8478 BROADCASTING TECHNOLOGY 1.0 20S 20E 20M 8479 RESEARCH, WRITE AND PERFORM 1.0 30S 30E 30M 8480 TELEVISION PRODUCTION 1.0 30S 30E 30M 1.0 30S 30E 30M 8481 PROGRAMMING FOR RADIO 8482 QUALITY CONTROL 1.0 40S 40E 40M 8483 MEDIA LITERACY 1.0 40S 40E 40M 1.0 40S 40E 40M 8484 BROADCASTING REGULATIONS 8485 APPLIED ELEC. COMMUNICATIONS 1.0 40S 40E 40M BROADCAST MEDIA TECHNOLOGY/RADIO AND TELEVISION BROADCASTING 8612 \*BROADCASTING THEORY 1.0 20S 20E 20M 8613 \*OPERATION OF EQUIPMENT 1.0 20S 20E 20M Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017. 8614 SCRIPTING AND PLANNING 30S 30E 30M 1.0 1.0 30S 30E 30M 8615 PRODUCTION APPLICATIONS 8616 INTERMEDIATE BROADCASTING 1.0 30S 30E 30M 8617 INTERMEDIATE EQUIPMENT 1.0 30S 30E 30M 8618 INTERMEDIATE SCRIPTING 1.0 30S 30E 30M 8619 INTERMEDIATE PRODUCTION 30S 30E 30M 1.0 8620 ADVANCED BROADCASTING 1.0 40S 40E 40M 8621 ADVANCED EQUIPMENT 40S 40E 40M 1.0 8622 ADVANCED SCRIPTING 1.0 40S 40E 40M 8623 ADVANCED PRODUCTION 1.0 40S 40E 40M .5 15S 15E 15M 9114 EXPLORATION OF BROADCAST MEDIA TECH. 1.0 10S 10E 10M 1.0 20S 20E 20M 9116 INTRO. TO BROADCAST MEDIA TECHNOLOGY 9117 MULTI-CAMERA PRODUCTION FOR BROADCAST 1.0 30S 30E 30M 1.0 30S 30E 30M 9118 VIDEO POST-PRODUCTION FOR BROAD. MEDIA 9119 SINGLE CAMERA PRODTN. FOR BROAD. MEDIA 1.0 30S 30E 30M 9120 ELECTRONIC NEWS GATHERING-BROAD. MEDIA 1.0 40S 40E 40M 9121 DOCUMENTARY & FILM PROD.-BROAD. MEDIA 1.0 40S 40E 40M 9122 ADV. MULTI-CAMERA PROD.-BROAD. MEDIA 1.0 40S 40E 40M 9123 APPLIED BROADCAST MEDIA TECHNOLOGY 1.0 40S 40E 40M

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Code Description

Credits Grade/Level

## **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL**

(cont'd)

#### CABINET AND FURNITURE MAKING

9176	EXPLORATION OF CABINETMAKING	.5	15S	15E	15M	
		1.0	10S	10E	10M	
9177	INTRODUCTION TO CABINETMAKING	1.0	20S	20E	20M	
9178	CABINETMAKING TOOLS AND EQUIPMENT	1.0	30S	30E	30M	
9179	CABINET AND FURNITURE DESIGN	1.0	30S	30E	30M	
9181	CABINETRY	1.0	30S	30E	30M	
9182	FURNITURE MAKING	1.0	40S	40E	40M	
9183	ADVANCED CABINETRY	1.0	40S	40E	40M	
9185	ADVANCED FURNITURE MAKING	1.0	40S	40E	40M	
9186	APPLIED CABINET AND FURNITURE MAKING	1.0	40S	40E	40M	
	DESIGN DRAFTING	G/DRAF1	TING			
8430	*SPECIALIZED APPLICATIONS	1.0	40S	40E	40M	
		_				

8434	INTRODUCTION TO DESIGN DRAFTING	.5	15S 15E 15M	
		1.0	10S 10E 10M	
8435	DESIGN DRAFTING ESSENTIALS 1	1.0	20S 20E 20M	
8436	DESIGN DRAFTING ESSENTIALS 2	1.0	30S 30E 30M	
8437	ARCHITECTURAL DESIGN DRAFTING	1.0	30S 30E 30M	
8438	ENGINEERING DESIGN DRAFTING	1.0	30S 30E 30M	
8439	ADVANCED ENGINEERING DESIGN DRAFTING	1.0	40S 40E 40M	
8648	ADVANCED ARCHITECTURAL DESIGN DRAFTING	1.0	40S 40E 40M	
8649	APPLIED ARCHITECTURAL DESIGN DRAFTING	1.0	40S 40E 40M	
8669	APPLIED ENGINEERING DESIGN DRAFTING	1.0	40S 40E 40M	

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				THOE.			
Code	Description	Credits	Grade/Level				
TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL (cont'd							
-	ELECTRONICS TECHN	OLOGY/EI	LECTRONICS	<b>,</b>			
8444	*SEMICONDUCTOR DEVICES	1.0	305 30E 30M				
8445	*SEMICONDUCTOR AMPLIFIERS	1.0	30S 30E 30M				
8446	*POWER CONTROL DEVICES	1.0	30S 30E 30M				
8447	*COMMUNICATION SYSTEMS	1.0	30S 30E 30M				
8448	*DIGITAL LOGIC	1.0	30S 30E 30M				
8449	*BASIC TECH APPLICATIONS	1.0	30S 30E 30M				
8450	*MICROPROCESSORS	1.0	30S 30E 30M				
8451	*INTRO CAD/CAM/CNC	1.0	30S 30E 30M				
Note	: The 2016-2017 school year is the final	vear for	reporting th	e courses			
	have an asterisk next to them. these coo	-					
8452	MICROPROCESSOR INTERFACING	1.0	40S 40E 40M				
8453	ADVANCED TECH APPLICATIONS	1.0	40S 40E 40M				
8454	ADVANCED COMMUNICATIONS	1.0	40S 40E 40M				
8455	TROUBLESHOOTING AND REPAIR	1.0	40S 40E 40M				
8456	DIGITAL APPLICATIONS	1.0	40S 40E 40M				
8457	ADVANCED CAD/CAM/CNC	1.0	40S 40E 40M				
8458	ROBOTICS	1.0	40S 40E 40M				
8459	FLUID POWER	1.0	40S 40E 40M				
8460	MICROPROCESSOR APPLICATIONS	1.0	40S 40E 40M				
8461	PROGRAMMABLE LOGIC CONTROLLERS	1.0	40S 40E 40M				
8462	APPLIED ELECTRONICS	1.0	40S 40E 40M				
9037	EXPLORATION OF ELECTRONICS TECHNOLOGY	.5	15S 15E 15M				
		1.0	10S 10E 10M				
9038	INTRODUCTION TO ELECTRONICS TECHNOLOGY	1.0	20S 20E 20M				
9039	ELECTRONICS AC CIRCUIT FUNDAMENTALS	1.0	30S 30E 30M				
9048	SEMICONDUCTOR TECH & SIGNAL DEVICES	1.0	30S 30E 30M				
9049	SEMICONDUCTOR POWER DEVICES	1.0	30S 30E 30M				
9050	DIGITAL DEVICES AND BASIC LOGIC	1.0	40S 40E 40M				
9051	ADVANCED DIGITAL SYSTEMS	1.0	40S 40E 40M				
9052	MICROPROCESSORS	1.0	40S 40E 40M				
9053	MICROPROCESSOR APPLICATIONS	1.0	40S 40E 40M				

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**Code** Description Credits Grade/Level **TECHNOLOGY EDUCATION** (cont'd) **TECHNICAL VOCATIONAL** FASHION DESIGN AND TECHNOLOGY 8492 \*FASHION PRODUCTION 20S 20E 20M 1.0 Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017. 8493 FASHION DESIGN 1.0 30S 30E 30M 8494 PATTERN DESIGN 1.0 30S 30E 30M 8495 ADVANCED PATTERN DESIGN 1.0 30S 30E 30M 8496 ADVANCED FASHION PRODUCTION 30S 30E 30M 1.0 8497 ADVANCED FASHION DESIGN 1.0 30S 30E 30M 8498 PATTERN DESIGN APPLICATIONS 1.0 30S 30E 30M 8499 DESIGN APPLICATIONS 1.0 40S 40E 40M 8500 MACHINE KNITTING 1.0 40S 40E 40M 1.0 40S 40E 40M 8501 FASHION ENTREPRENEURSHIP 8502 APPLIED FASHION TECH 1.0 40S 40E 40M 9124 EXPLORATION OF FASHION DESIGN & TECH. 15S 15E 15M .5 1.0 10S 10E 10M 9125 INTRO. TO FASHION DESIGN & TECHNOLOGY 1.0 20S 20E 20M 9126 KNITWEAR DESIGN & CONSTRUCTION 1.0 30S 30E 30M 9127 SEMI-FORMAL WEAR DESIGN & CONSTRUCTION 1.0 30S 30E 30M 9128 PANT DESIGN & CONSTRUCTION 1.0 30S 30E 30M 9129 TAILORED GARMENT DESIGN & CONSTRUCTION 1.0 40S 40E 40M 9131 FORMAL WEAR DESIGN & CONSTRUCTION 1.0 40S 40E 40M 9132 APPLIED TEXTILE DESIGN 1.0 40S 40E 40M 9134 APPLIED FASHION ENTREPRENEURSHIP 1.0 40S 40E 40M

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**Code** Description Credits Grade/Level **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL** (cont'd) **GRAPHIC DESIGN/ADVERTISING ART** 8379 GAME DESIGN & DEVELOPMENT 40S 40E 40M 1.0 8382 \*DRAWING 1.0 20S 20E 20M 8383 \*DESIGN 20S 20E 20M 1.0 8384 \*PRODUCTION ART 1.0 20S 20E 20M Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017. 8385 ILLUSTRATION 30S 30E 30M 1.0 8386 ADVERTISING LAYOUT 1.0 30S 30E 30M 8387 TYPE DESIGN 30S 30E 30M 1.0 8388 ADVANCED PRODUCTION ART 1.0 30S 30E 30M 8389 TYPOGRAPHY 1.0 40S 40E 40M 8390 GRAPHIC DESIGN 1.0 40S 40E 40M 8391 ADVANCED APPLICATIONS 1.0 40S 40E 40M 8392 PORTFOLIO MANAGEMENT 40S 40E 40M 1.0 8393 APPLIED ADVERTISING ART 1.0 40S 40E 40M 8394 L.I. TECH INITIATIVE 40S 40E 40M 1.0 8395 ANIMATION 1.0 40S 40E 40M 8396 DIGITAL IMAGING 40S 40E 40M 1.0 9135 EXPLORATION OF GRAPHIC DESIGN .5 15S 15E 15M 1.0 10S 10E 10M 1.0 20S 20E 20M 9136 FUNDAMENTALS OF GRAPHIC DESIGN 9137 GRAPHIC DESIGN AND LAYOUT 1.0 30S 30E 30M 1.0 30S 30E 30M 9138 ILLUSTRATION FOR GRAPHIC DESIGN 9139 INTERACTIVE GRAPHIC DESIGN 1.0 30S 30E 30M 1.0 40S 40E 40M 9140 ADV. GRAPHIC DESIGN AND LAYOUT 1.0 40S 40E 40M 9141 ADV. ILLUSTRATION FOR GRAPHIC DESIGN 9142 ADV. INTERACTIVE GRAPHIC DESIGN 1.0 40S 40E 40M 9144 GRAPHIC DESIGN PORTFOLIO 40S 40E 40M 1.0 INDUSTRIAL ELECTRONICS 8541 \*POWER ELECTRONICS 40S 40E 40M 1.0 8542 \*APPLIED IND. ELECTRONICS 1.0 40S 40E 40M

Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017.

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Code Description

Credits Grade/Level

## **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL**

(cont'd)

#### INFORMATION SCIENCE (STEINBACH REG. SEC. SCHOOL ONLY)

8022	*INTRO. COMPUTER PROBLEM SOLVING	1.0	20S	20E	20M
8023	*WINDOWS GUI DEVELOPMENT	1.0	30S	30E	30M
8024	*DIGITAL PRINT MEDIA TECHNOLOGY	1.0	30S	30E	30M
8039	*NETWORK TECHNOLOGIES	1.0	30S	30E	30M
8040	*E-MEDIA PRESENTATION TECHNOLOGY	1.0	30S	30E	30M
8041	*GRAPHICS AND GAMING ALGORITHMS	1.0	40S	40E	40M
8042	*DATABASE DESIGN AND APPLICATIONS	1.0	40S	40E	40M
8043	*DIGITAL IMAGE PROCESSING	1.0	40S	40E	40M
8044	*WEB INFO. DESIGN AND APPLICATION	1.0	40S	40E	40M
8260	*ADV. MULTIMEDIA DEVELOPMENT	1.0	40S	40E	40M
8263	*ADV. PRINT PRODUCTION	1.0	40S	40E	40M
8264	*ADV. VIDEO PRODUCTION	1.0	40S	40E	40M

Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017.

#### **INTERACTIVE DIGITAL MEDIA**

9093	EXPLORTN. OF INTERACTIVE DIGITAL MEDIA	.5	15S 15E 15M
		1.0	10S 10E 10M
9094	INTRO. TO INTERACTIVE DIGITAL MEDIA	1.0	20S 20E 20M
9095	INTERACTIVE DIGITAL MEDIA DESIGN	1.0	30S 30E 30M
9096	INTERACTIVE DIGITAL ASSET CREATION	1.0	30S 30E 30M
9097	CODING FOR INTERACTIVE DIGITAL MEDIA	1.0	30S 30E 30M
9098	ADV. INTERACTIVE DIGTL. ASSET CREATION	1.0	40S 40E 40M
9099	ADV. CODING FOR INTERACTV. DIGTL.MEDIA	1.0	40S 40E 40M
9100	PROJ. MGMT. FOR INTERACTV. DIGTL.MEDIA	1.0	40S 40E 40M
9101	FUTURES IN INTERACTIVE DIGITAL MEDIA	1.0	40S 40E 40M

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Code Description Credits Grade/Level **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL** (cont'd) JEWELLERY AND METALSMITHING/JEWELLERY ARTS 8556 \*ADV. CONSTRUCTION & SOLDERING 1.0 40S 40E 40M 8557 \*GEM SETTING 1.0 40S 40E 40M 8558 \*ADV. GEM SETTING 1.0 40S 40E 40M 8559 \*JEWELLERY REPAIR TECHNIQUES 1.0 40S 40E 40M 8560 \*JEWELLERY STUDIO 1.0 40S 40E 40M Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017. 8768 EXPLOR OF JEWELLERY METALSMITHING 15S 15E 15M .5 1.0 10S 10E 10M 1.0 20S 20E 20M 8769 INTRO JEWELLERY METALSMITHING 1.0 30S 30E 30M 8799 LOST WAX CASTING 1.0 30S 30E 30M 8814 BASIC CONSTRUCTION AND SOLDERING 8823 FORGING AND FORMING 1.0 30S 30E 30M 1.0 40S 40E 40M 8824 JEWELLERY REPAIR 8838 ADVANCED CONSTRUCTION & SOLDERING 1.0 40S 40E 40M 8839 GEM SETTING 1.0 40S 40E 40M 8840 ADVANCED GEM SETTING 1.0 40S 40E 40M MICROCOMPUTER SYSTEMS TECHNICIAN 8098 NETWORKING TECHNOLOGY II 1.0 40S 40E 40M 8099 NETWORKING TECHNOLOGY III 1.0 40S 40E 40M 8397 ADV. WEB AUTHORING 1.0 40S 40E 40M 8398 WEB GRAPHICS 1.0 40S 40E 40M 8399 PROJECT MANAGEMENT FUNDAMENTALS 1.0 40S 40E 40M 8763 COMPUTER PROGRAMMING 1.0 40S 40E 40M 8892 \*EXPLORING INDUSTRY HARDWARE 20S 20E 20M 1.0 Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017. 8893 OPERATING SYSTEMS 1 30S 30E 30M 1.0 30S 30E 30M 8894 APPLICATION SOFTWARE 1.0 1.0 30S 30E 30M 8895 ADVANCED OPERATING SYSTEMS 1.0 30S 30E 30M 8896 BASICS AND TROUBLESHOOTING 8897 CUSTOMER SERVICE SKILLS 1.0 40S 40E 40M 8898 TROUBLESHOOTING PERSONAL COMPUTERS 1.0 40S 40E 40M 8899 NETWORKING TECHNOLOGY 1.0 40S 40E 40M 8900 CONFIGURING SYSTEMS 40S 40E 40M 1.0 1.0 30S 30E 30M 8947 INTRODUCTION TO WEB AUTHORING 8964 INTERMEDIATE WEB AUTHORING 1.0 40S 40E 40M 1.0 40S 40E 40M 8976 NETWORKING TECHNOLOGY IV 1.0 40S 40E 40M 8978 DATABASE FUNDAMENTALS & MS ACCESS

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Code Description

Credits Grade/Level

## TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL

(cont'd)

#### NETWORKING AND CYBER SECURITY

9102	EXPLOR. OF NETWORKING & CYBER SECURITY	.5	15S	15E	15M	
		1.0	10S	10E	10M	
9103	HARDWARE & SOFTWARE ESSENTIALS	1.0	20S	20E	20M	
9104	OPERATING SYSTEMS	1.0	30S	30E	30M	
9105	NETWORKING TECHNOLOGIES	1.0	30S	30E	30M	
9106	CYBER SECURITY ESSENTIALS	1.0	30S	30E	30M	
9107	ADVANCED OPERATING SYSTEMS	1.0	40S	40E	40M	
9108	ADVANCED NETWORKING TECHNOLOGIES	1.0	40S	40E	40M	
9109	SERVER ADMINISTRATION	1.0	40S	40E	40M	
9111	APPLIED NETWORKING & CYBER SECURITY	1.0	40S	40E	40M	
	PHOTOGRA	PHY				
8567	*PHOTOGRAPHY EQUIPMENT	1.0	20S	20E	20M	
	*COMPOSITION AND DESIGN	1.0		20E		
	The 2016-2017 school year is the final year		-		-	
tnat	have an asterisk next to them. These codes	WIII 6	ena A	ugus	t 31,	2017.
	LIGHTING	1.0	30S	30E	30M	
8570	DARKROOM APPLICATIONS	1.0	30S	30E	30M	
8571	BASIC STUDIO	1.0	30S	30E	30M	
8572	FORMAT PHOTOGRAPHY	1.0	30S	30E	30M	
8573	MONOCHROME PHOTOGRAPHY	1.0	30S	30E	30M	
8574	COLOUR PHOTOGRAPHY	1.0	30S	30E	30M	
8575	COLOUR TRANSPARENCIES	1.0	30S	30E	30M	
8576	ADVANCED STUDIO	1.0	40S	40E	40M	
8577	ADVANCED LIGHTING	1.0	40S	40E	40M	
8578	PORTRAIT PHOTOGRAPHY	1.0	40S	40E	40M	
8579	PRODUCT PHOTOGRAPHY	1.0	40S	40E	40M	
8580	MULTI-MEDIA	1.0	40S	40E	40M	
8581	PORTFOLIO MANAGEMENT	1.0	40S	40E	40M	
8582	ADVANCED COLOUR PHOTOGRAPHY	1.0	40S	40E	40M	
8583	APPLIED PHOTOGRAPHY	1.0	40S	40E	40M	
9156	EXPLORATION OF PHOTOGRAPHY	.5	15S	15E	15M	
		1.0	10S	10E	10M	
9157	INTRODUCTION TO PHOTOGRAPHY	1.0	20S	20E	20M	
9158	PHOTOGRAPHIC EQUIPMENT	1.0	30S	30E	30M	
9159	PHOTOGRAPHIC LIGHTING	1.0	30S	30E	30M	
9160	DIGITAL DARKROOM	1.0	30S	30E	30M	
9161	ADV. PHTOGRAPHIC EQUIPMENT	1.0	40S	40E	40M	
9162	ADV. PHOTOGRAPHIC LIGHTING	1.0	40S	40E	40M	
9163	ADV. DIGITAL DARKROOM	1.0	40S	40E	40M	
9164	APPLIED PHOTOGRAPHY	1.0	40S	40E	40M	

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Code Description

Credits Grade/Level

## **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL**

(cont'd)

#### PRINT MEDIA/GRAPHIC ARTS

8465	INTRODUCTION TO PRINT PRODUCTION	.5	15S	15E	15M	
		1.0	10S	10E	10M	
8466	PRINT PRODUCTION FUNDAMENTALS	1.0	20S	20E	20M	
8467	DESIGN	1.0	30S	30E	30M	
8468	PREPRESS	1.0	30S	30E	30M	
8469	PRINT PRODUCTION	1.0	30S	30E	30M	
8470	ADVANCED DESIGN	1.0	40S	40E	40M	
8471	ADVANCED PREPRESS	1.0	40S	40E	40M	
8472	ADVANCED PRINT PRODUCTION	1.0	40S	40E	40M	
8473	APPLIED PRINT MEDIA	1.0	40S	40E	40M	
	PRODUCTIO	ON ART				
8597	*DRAWING	1.0	20S	20E	20M	
8598	*DESIGN AND LAYOUT	1.0	20S	20E	20M	
Note	: The 2016-2017 school year is the final ye	ear for	repo	ortin	g the courses	
that	have an asterisk next to them. These codes	s will	end A	Augus	st 31, 2017.	
8599	COMPUTER IMAGING	1.0	30S	30E	30M	
8600	CAMERA-READY ART	1.0	30S	30E	30M	
8601	RELATED PHOTOGRAPHY	1.0	30S	30E	30M	
8602	NEGATIVE ASSEMBLY	1.0	30S	30E	30M	
8603	PRINTING AND PRESS OPERATION	1.0	40S	40E	40M	
8604	JOB READINESS	1.0	40S	40E	40M	
8605	ADVANCED COMPUTER IMAGING	1.0	40S	40E	40M	

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Code Description

Credits Grade/Level

## **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL**

(cont'd)

#### SOUND ENGINEERING/AUDIO RECORDING PRODUCTION AND PERFORMANCE

8402	*INTRO TO MUSIC THEORY	1.0	20S	20E	20M
8403	*INTRO TO MUSIC SKILLS	1.0	20S	20E	20M
8404	AUDIO ENGINEERING - LIVE	1.0	30S	30E	30M
8405	INTERMEDIATE MUSIC THEORY	1.0	30S	30E	30M
8406	HISTORY OF MUSIC	1.0	30S	30E	30M
8407	AUDIO ENGINEERING - STUDIO	1.0	30S	30E	30M
8408	ADVANCED MUSIC THEORY	1.0	40S	40E	40M
8409	ELECTRONIC MUSIC	1.0	40S	40E	40M
8410	APPLIED AUDIO	1.0	40S	40E	40M
8411	HISTORY OF MODERN MUSIC	1.0	40S	40E	40M
8412	ARRANGING	1.0	40S	40E	40M
8413	ADVANCED APPLIED AUDIO	1.0	40S	40E	40M
8431	*INTRO TO RECORDING TECHNOLOGY	1.0	20S	20E	20M

Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017.

8432	INTERMEDIATE RECORDING TECHNOLOGY	1.0	30S 30E 30M
8433	ADVANCED RECORDING TECHNOLOGY	1.0	40S 40E 40M
9165	EXPLORATION OF SOUND ENGINEERING	.5	15S 15E 15M
		1.0	10S 10E 10M
9166	INTRODUCTION TO SOUND ENGINEERING	1.0	20S 20E 20M
9167	MUSIC THEORY FOR SOUND ENGINEERING	1.0	30S 30E 30M
9168	SOUND ENGINEERING FOR STUDIO PRODUCTION	1.0	30S 30E 30M
9169	SOUND ENGINEERING FOR LIVE PERFORMANCE:	1.0	30S 30E 30M
9170	ADV. MUSIC THEORY FOR SOUND ENGINEERING	1.0	40S 40E 40M
9171	ADV. SOUND ENGINEERING FOR STUDIO PROD	1.0	40S 40E 40M
9172	ADV. SOUND ENGINEERING FOR LIVE PERF.	1.0	40S 40E 40M
9173	APPLIED SOUND ENGINEERING	1.0	40S 40E 40M

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Code Description

Credits Grade/Level

## **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL**

#### AIRCRAFT MAINTENANCE TECHNOLOGY

8504	EXPLORING AIRCRAFT MAINT TECH	.5	15S	15E	15M				
		1.0	10S	10E	10M				
8527	INTRO AIRCRAFT MAINT TECH	1.0	20S	20E	20M				
8528	AIRCRAFT ENGINES	1.0	30S	30E	30M				
8529	AIRCRAFT GROUND HANDLING	1.0	30S	30E	30M				
8530	AIRCRAFT DRAWINGS & DOCUMENTS	1.0	30S	30E	30M				
8531	AIRCRAFT STRUCTURES & MATERIALS	1.0	40S	40E	40M				
8532	AIRCRAFT HARDWARE	1.0	40S	40E	40M				
8533	AIRCRAFT STRUCTURAL REPAIR	1.0	40S	40E	40M				
8534	AIRCRAFT SYSTEMS	1.0	40S	40E	40M				
AUTOMOTIVE TECHNOLOGY									

869	5 INTRODUCTION TO AUTOMOTIVE TECHNOLOGY	.5	15S	15E	15M
		1.0	10S	10E	10M
869	5 AUTOMOTIVE SYSTEMS AND SERVICE	1.0	20S	20E	20M
869'	7 ENGINE FUNDAMENTALS AND SERVICE	1.0	30S	30E	30M
869	3 CHASSIS FUNDAMENTALS AND SERVICE	1.0	30S	30E	30M
869	O DRIVETRAIN FUNDAMENTALS AND SERVICE	1.0	30S	30E	30M
870	) AUTOMOTIVE ELECTRICAL SYSTEMS	1.0	40S	40E	40M
870	VEHICLE SYSTEMS PART 1	1.0	40S	40E	40M
8703	2 VEHICLE SYSTEMS PART 2	1.0	40S	40E	40M
870	APPLIED DIAGNOSTIC STRATEGIES	1.0	40S	40E	40M

#### AVIATION AND AEROSPACE TECHNOLOGIES/METALS

8256	*AIRCRAFT WELDING	1.0	40S	40E	40M
8257	*APPLIED AEROSPACE TECH	1.0	40S	40E	40M
8259	*COMPOSITE FABRICATION	1.0	40S	40E	40M

Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017.

8543 EXPLOR AVIATION & AEROSPACE TECH	.5	15S 15E 15M
	1.0	10S 10E 10M
8544 INTRO AVIATION & AEROSPACE TECH	1.0	20S 20E 20M
8545 AIRCRAFT COMPONENTS & FUNCTIONS	1.0	30S 30E 30M
8546 AIRCRAFT MATERIALS AND FABRICATION	1.0	30S 30E 30M
8547 RECIPROCATING ENGINES	1.0	30S 30E 30M
8548 AIRCRAFT STRUCTURE AND REPAIR	1.0	40S 40E 40M
8549 AIRCRAFT ELECTRICAL SYSTEMS	1.0	40S 40E 40M
8561 AIRCRAFT SYSTEMS AND PROPULSION	1.0	40S 40E 40M
8562 APPLIED AVIATION AERO TECH	1.0	40S 40E 40M

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Code Description

Credits **Grade/Level** 

## **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL**

(cont'd)

#### **BAKING AND PASTRY ARTS**

8231 EXPLORING BAKING & PASTRY ARTS	.5 15S 15E 15M	
	1.0 10S 10E 10M	
8324 INTRO BAKING AND PASTRY ARTS	1.0 20S 20E 20M	
8338 QUICK BREADS COOKIES DOUGHNUTS PIES	1.0 30S 30E 30M	
8339 YEAST DOUGH PRODUCTS	1.0 30S 30E 30M	
8358 CAKES, FILLINGS, ICINGS AND DECORATION	1.0 30S 30E 30M	
8359 TARTS & SPECIAL PASTRIES	1.0 40S 40E 40M	
8374 MODERN & CLASSIC DESSERTS & PLATING	1.0 40S 40E 40M	
8375 ADVANCED BREAD PRODUCTS	1.0 40S 40E 40M	
8998 ADVANCED BAKING & PASTRIES	1.0 40S 40E 40M	
CARPE	NTRY	
8584 INTRODUCTION TO CARPENTRY	.5 15S 15E 15M	
	1.0 10S 10E 10M	
8585 CARPENTRY FUNDAMENTALS	1.0 20S 20E 20M	
8586 *FOUNDATIONS AND FLOOR FRAMING	1.0 30S 30E 30M	
8587 *WALL AND BASIC ROOF FRAMING	1.0 30S 30E 30M	
8588 *MILLWORK	1.0 30S 30E 30M	
Note: The 2016-2017 school year is the final	year for reporting the courses	
that have a single asterisk next to them. The	se codes will end August 31, 2017.	
8589 **ADVANCED FRAMING	1.0 40S 40E 40M	
8590 **EXTERIOR FINISHING	1.0 40S 40E 40M	
8591 **INTERIOR FINISHING	1.0 40S 40E 40M	
8592 **ADVANCED MILLWORK	1.0 40S 40E 40M	
Note: The 2017-2018 school year is the final	year for reporting the courses	
that have a double asterisk next to them. The		
	_	
9188 CARPENTRY TOOLS AND EQUIPMENT	1.0 30S 30E 30M	
9189 FRAMING	1.0 30S 30E 30M	
Note: Individual students may not receive crea	lit for both 9189 & 8586 or 8587.	
9190 INTERIOR/EXTERIOR FINISHING	1.0 30S 30E 30M	
Note: Individual students may not receive cree	dit for both 9190 & 8590 or 8591.	
9191 SURVEYING & CONCRETE	1.0 40S 40E 40M	
9192 ADVANCED FRAMING	1.0 40S 40E 40M	
Note: Individual students may not rceive cred	it for both 9192 and 8589.	
9193 CARPENTRY MILLWORK	1.0 40S 40E 40M	
Note: Individual students may not receive crea	dit for both 9193 & 8588 or 8592.	
9194 APPLIED CARPENTRY	1.0 40S 40E 40M	

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Code Description

## **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL**

Credits Grade/Level

(cont'd)

#### CHILD CARE

8650	INTRO TO CHILD CARE	1.0	10S	10E	10M
8651	. INTRO TO CHILD CARE	.5	15S	15E	15M
8652	INTRO TO INFANTS	1.0	20S	20E	20M
8653	INTRO TO PRESCHOOL	1.0	20S	20E	20M
8654	CHILDREN'S BEHAVIOUR	1.0	30S	30E	30M
8655	CURRICULUM IDEAS	1.0	30S	30E	30M
8656	HUMAN DEVELOPMENT	1.0	30S	30E	30M
8657	CHILD CARE TECHNIQUES	1.0	30S	30E	30M
8658	INTRO TO SCHOOL AGE	1.0	30S	30E	30M
8659	INTRO TO APPLIED CHILD CARE	1.0	30S	30E	30M
8660	HISTORICAL PERSPECTIVES	1.0	30S	30E	30M
8661	COMMUNICATION SKILLS	1.0	30S	30E	30M
8662	FAMILY DYNAMICS & CHILD ABUSE	1.0	40S	40E	40M
8663	CURRICULUM PLANNING	1.0	40S	40E	40M
8664	ADVANCED PRESCHOOL	1.0	40S	40E	40M
8665	ADVANCED SCHOOL AGE	1.0	40S	40E	40M
8666	APPLIED CHILD CARE	1.0	40S	40E	40M
8667	ADVANCED APPLIED CHILD CARE	1.0	40S	40E	40M
8668	B H.S. TECH INITIATIVE	1.0	40S	40E	40M

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Code	Description	Credits	Grade/Level	
	HNOLOGY EDUCATION HNICAL VOCATIONAL			(cont'd)
	<b>COLLISION REPAIR &amp; REFINISHING</b>	TECHNOL		````
8020	*INTRO TO PAINT PREP	1.0		
	*BODY ALIGNMENT	1.0		
	*COMPONENT REPAIR/REPLACEMENT	1.0		
	*ELECTRICAL & MECHANICAL SERVICE			
	*REFINISHING PREPARATION	1.0		
Note	: the 2016-2017 school year is the final			GOURGOS
	have an asterisk next to them. These cod	-		
8034	COLLISION REPAIR	1.0	40S 40E 40M	
8035	PAINTING AND REFINISHING	1.0	40S 40E 40M	
8036	SHOP MANAGEMENT	1.0	40S 40E 40M	
8037	ADVANCED REFINISHING	1.0	40S 40E 40M	
8038	APPLIED AUTO BODY	1.0	40S 40E 40M	
9028	EXPL OF COLLISION REPAIR & REFINISH TE(	.5	15S 15E 15M	
		1.0	10S 10E 10M	
9029	INTRO TO COLLISION REPAIR & REFINISH TI	1.0	20S 20E 20M	
9030	FUNDAMENTALS OF COLLSN REPAIR & REFINSI	1.0	30S 30E 30M	
9031	AUTOMOTIVE METALS & WELDING	1.0	30S 30E 30M	
9032	CORROSION PROTECTION	1.0	30S 30E 30M	
9033	DAMAGE ANALYSIS AND STRUCTURAL REPAIRS	1.0	40S 40E 40M	
9034	WELD-ON & BOLT-ON PANEL REPLACEMENT	1.0	40S 40E 40M	
9035	SURFACE PREPARATION & REFINISHING	1.0	40S 40E 40M	
9036	COLOUR THEORY & CAREER PREPARATION	1.0	40S 40E 40M	
	CULINAI	RY ARTS		
8775	MEATS AND POULTRY	1.0	30S 30E 30M	
8786	*APPLIED FOOD SERVICES	1.0	40S 40E 40M	
Note	: The 2016-2017 school year is the final	year for	reporting the	courses
that	have an asterisk next to them. These cod	les will	end August 31,	2017.
8790	EXPLORATION OF THE CULINARY ARTS	.5 1.0	15S 15E 15M 10S 10E 10M	
8791	COOKING PRINCIPLES	1.0	20S 20E 20M	
	GARDE MANGER	1.0	30S 30E 30M	
	PATISSERIE AND BAKING	1.0	305 30E 30M	
	VEG, FUNGI, STARCHES & FARINACEOUS PRO		305 30E 30M	
	STOCKS, SOUPS AND SAUCES	1.0	40S 40E 40M	
	BREAKFAST AND DAIRY	1.0	405 40E 40M	
	MENU PLANNING AND FOOD COSTING	1.0	405 40E 40M	
	MEANS, POULTRY, FISH AND SEAFOOD	1.0	405 40E 40M	
5,20		<b>T</b> • 0	100 100 100	

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	CT TABLE HANDBOOK - TECHNOLOGY EDUCA			TO DATE: PAGE :
Code	Description	Credits	Grade/Leve	
TEC	HNOLOGY EDUCATION			
	HNICAL VOCATIONAL			(cont'd)
	DENTAL	ASSISTING		
8563	INTRODUCTION TO DENTAL ASSISTING	1.0	30S 30E	30M
8564	HUMAN BODY SYSTEMS	1.0	30S 30E	30M
8593	RESTORATIVE DENTISTRY	1.0	30S 30E	30M
8594	DENTAL OFFICE ADMINISTRATION	1.0	30S 30E	30M
8606	INTRA-ORAL SKILLS I	1.0	40S 40E	40M
8607	INTRA-ORAL SKILLS II	1.0	40S 40E	40M
8608	DENTAL SPECIALTIES	1.0	40S 40E	40M
8609	INTRODUCTION TO PATIENT CARE	1.0	40S 40E	40M
	DENTAL TH	CHNOLOG	GY	
8624	INTRO DENTAL TECH REMOVABLE PROST	1.0	30S 30E	30M
8625	DESIGN AND FAB REMOVABLE PROST	1.0	30S 30E	30M
8626	INTRODUCTION TO ORTHODONTICS	1.0	30S 30E	30M
8627	DESIGN FAB ORTHODONTIC APPLIANCES	1.0	30S 30E	30M
8628	INTRO FIXED PROST: CROWN & BRIDGE	1.0	40S 40E	40M
8629	DESIGN FAB FIXED PROST CROWN BRIDGE	1.0	40S 40E	40M
8670	INTRO TO DENTAL CERAMIC TECHNOLOGY	1.0	40S 40E	40M
8671	DESIGN FAB CERAMIC RESTORATIONS	1.0	40S 40E	40M
	ELECTRICAL TRADES TE	CHNOLOG	Y/ELECTRIC	CITY
8129	*RESIDENTIAL WIRING	1.0	30S 30E	30M
8130	*INDUSTRIAL WIRING	1.0	30S 30E	30M
8131	*DC MACHINES	1.0	30S 30E	30M
8132	*AC MACHINES	1.0	30S 30E	30M
Note	: The 2016-2017 school year is the final	year for	reporting	g the courses
that	have an asterisk next to them. These co	des will	end August	31, 2017.
8133	AC MOTOR CONTROLS	1.0	40S 40E	40M
8134	DIGITAL TECHNIQUES	1.0	40S 40E	40M
8135	THREE PHASE POWER	1.0	40S 40E	40M
8136	MICRO CONTROL	1.0	40S 40E	40M
8137	APPLIED ELECTRICITY	1.0	40S 40E	40M
9054	EXPLORATION OF ELECTRICAL TRADES TECH.	.5	15S 15E	15M
		1.0	10S 10E	10M
9055		1 0	200 200	2014

9055	INTRODUCTION TO ELECTRICAL TRADES TECH	1.0	20S	20E
9056	ELECTRICAL TRADES DC FUNDAMENTALS	1.0	30S	30E
9057	RESIDENTIAL WIRING	1.0	30S	30E
9058	ELECTRICAL WIRING METHODS	1.0	30S	30E
9059	ADVANCED RESIDENTIAL WIRING	1.0	40S	40E
9060	ELECTRICAL TRADES AC FUNDAMENTALS	1.0	40S	40E
9061	ADVANCED ELECTRICAL WIRING METHODS	1.0	40S	40E
9062	APPLIED ELECTRICAL TRADES TECHNOLOGY	1.0	40S	40E

20M 30M 30M 30M 40M 40M 40M 40M

#### SISTING

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					PAGE :
Code	Description	Credits	Grade/		
	HNOLOGY EDUCATION HNICAL VOCATIONAL				(cont'd)
	<b>EXPLORATION OF TECHNICA</b>	AL VOCAT	IONAL E	DUCATI	ON
9174	EXPLORATION OF TECHNICAL VOCATIONAL ED	. 5	158 1	5E 15M	
2272		1.0		0E 10M	
	HAIKS	FYLING			
8312	INTRODUCTION TO HAIRSTYLING	1.0	20S 2	0E 20M	
8313	BASIC HAIRSTYLING	1.0	20S 2	0E 20M	
8314	BASIC HAIRCUTTING & THERMAL STYLING	1.0	20S 2	0E 20M	
8315	RELATED SALON SERVICES	1.0	20S 2	0E 20M	
8316	INTERMEDIATE HAIRCUTTING & BARBER TECH	1.0	30S 3	0E 30M	
8317	HAIR COLOURING	1.0	30S 3	0E 30M	
8318	INTERMEDT. HAIRSTYLING & ARTIFCL. HAIR	1.0	30S 3	0E 30M	
	CHEMICAL TEXTURE SERVICES	1.0		0E 30M	
8320	ADVANCED HAIRSTYLING AND COLOURING	1.0	40S 4	0E 40M	
8321	ADVANCED HAIRCUTTING & CHEMICAL TEXTURI	1.0	40S 4	0E 40M	
8322	SALON OPERATION	1.0	40S 4	0E 40M	
8323	CERTIFICATE PREPARATION	1.0	40S 4	0E 40M	
9113	EXPLORATION OF HAIRSTYLING	.5	15S 1	5E 15M	
		1.0	10S 1	0E 10M	
	HEALTH CARE	ASSISTAN	T CVE		
8800	INTRO TO HEALTH CARE ASSISTANT	1.0	10s 1	0E 10M	
8801	INTRO TO HEALTH CARE ASSISTANT	.5	15S 1	5E 15M	
8802	THE LIFE CYCLE	1.0	40S 4	0E 40M	
8803	HUMAN RELATIONS	1.0	40S 4	0E 40M	
8804	SAFETY IN HEALTH CARE	1.0	40S 4	0E 40M	
8805	BODY MECHANICS AND MOVEMENT	1.0	40S 4	0E 40M	
8806	NUTRITION AND HYGIENE	1.0	40S 4	0E 40M	
8807	PROCEDURES AND TREATMENTS	1.0	40S 4	0E 40M	
8808	AGING AND RELATED DISORDERS	1.0	40S 4	0E 40M	
8809	LIFE MANAGEMENT	1.0	40S 4	0E 40M	
8810	PALLIATIVE CARE	.5	45S 4	5E 45M	
8811	CONCEPTS FOR PRACTICE	1.0	40S 4	0E 40M	
8812	PERSONAL CARE SKILLS AND NEEDS	1.0	40S 4	0E 40M	
8813	HEALTH & LIFESPAN DEVELOPMENT	.5	45S 4	5E 45M	

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Code	Description	Credits	Grade/Level	
	HNOLOGY EDUCATION HNICAL VOCATIONAL			(cont'd)
-	HEAVY DUTY EQUIPMENT TECH	NICIAN/HE	EAVY DUTY MECH	. ,
8152	*H.D. ELECTRICAL SYSTEMS	1.0	40S 40E 40M	
8153	*H.D. DRIVE TRAINS	1.0	40S 40E 40M	
8154	*H.D. HYDRAULIC SYSTEMS	1.0	40S 40E 40M	
8155	*APPLIED H.D. MECHANICS	1.0	40S 40E 40M	
Note	: The 2016-2017 school year is the final	year for	r reporting the	courses
that	have an asterisk next to them. These coo	des will	end August 31,	2017.
8672	EXPLORATION HEAVY DUTY EQUIP TECH	.5	15S 15E 15M	
		1.0	10S 10E 10M	
8673	INTRO HEAVY DUTY EQUIPMENT TECH	1.0	20S 20E 20M	
8674	DIESEL ENGINE FUNDAMENTALS SERVICE	1.0	30S 30E 30M	
8675	CHASSIS, FRAME AND UNDERCARRIAGE SYSTEM	1.0	30S 30E 30M	
8676	WELDING PROCESSES AND FUELS	1.0	30S 30E 30M	
8677	STD TRANS DRIVELINES TRANSFER CASE	1.0	40S 40E 40M	
8678	TIRES WHEELS BRAKE ASSEMBLIES	1.0	40S 40E 40M	
8679	ELECT FUND COMPUTER DIAGNOS EQUIP	1.0	40S 40E 40M	
8704	APPLIED HEAVY DUTY EQUIP TECH	1.0	40S 40E 40M	
	HORTICULTURE/HORTICU	LTURE AN	ND LANDSCAPING	r
8168	*HOUSE PLANT MAINTENANCE	1.0	40S 40E 40M	
8169	*DISEASE CONTROL	1.0	40S 40E 40M	
8170	*OUTSIDE MAINTENANCE	1.0	40S 40E 40M	
8171	*APPLIED HORTICULTURE	1.0	40S 40E 40M	
8172	*APPLIED LANDSCAPING	1.0	40S 40E 40M	
Note	: The 2016-2017 school year is the final	year for	r reporting the	courses
that	have an asterisk next to them. These coo	des will	end August 31,	2017.
8717	EXPLORATION OF HORTICULTURE	.5	15S 15E 15M	
		1.0	10S 10E 10M	
8718	INTRODUCTION TO HORTICULTURE	1.0	20S 20E 20M	
8719	APPLIED HORTICULTURE	1.0	30S 30E 30M	
8733	INTRO LANDSCAPE MAINTENANCE & CONST	1.0	30S 30E 30M	
8734	INTRO GREENHOUSE MAINTENANCE & PROD	1.0	30S 30E 30M	
8764	ADVANCED HORTICULTURE	1.0	40S 40E 40M	
8765	APPL LANDSCAPE MAINTENANCE & CONST	1.0	40S 40E 40M	
8766	APPL GREENHOUSE MAINTENANCE & PROD	1.0	40S 40E 40M	
8767	ARBORICULTURE	1.0	40S 40E 40M	

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Code Description

Credits Grade/Level

## **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL**

(cont'd)

#### HOTEL HOSPITALITY CVE

8825	BEVERAGE SERVICES	1.0	40S	40E	40M				
8826	DINING ROOM SKILLS	1.0	20S	20E	20M	40S	40E	40M	
8827	FOOD PREPARATION	1.0	40S	40E	40M				
8828	CUSTOMER SERVICES	1.0	40S	40E	40M				
8829	HOTEL AND CONSUMER MATH	1.0	40S	40E	40M				
8830	TOURISM	1.0	40S	40E	40M				
8831	RECEPTION DESK SKILLS	1.0	40S	40E	40M				
8832	HOUSEKEEPING SKILLS	1.0	40S	40E	40M				
8833	MANAGEMENT SKILLS	1.0	40S	40E	40M				
8834	APPLIED RECEPTION SERVICES	1.0	40S	40E	40M				
8835	APPLIED FOOD PREP	1.0	40S	40E	40M				
8836	APPLIED DINING ROOM SERVICES	1.0	40S	40E	40M				
8837	APPLIED MANAGEMENT	1.0	40S	40E	40M				

#### INDUSTRIAL ELECTRICITY

8189 *CANADIAN ELECTRICAL CODE	1.0	30S 30E 30M
8190 *INTERMEDIATE MOTOR CONTROLS	1.0	30S 30E 30M
Note: The 2016-2017 school year is the final ye	ear for	reporting the courses
that have an asterisk next to them. These codes	s will	end August 31, 2017.
		· · · · · · · · · · · · · · · · · · ·
8191 ADVANCED MOTOR CONTROLS	1.0	40S 40E 40M

#### MACHINING TECHNOLOGY/MACHINE SHOP

8223	*ADVANCED MILLING	1.0	40S 40E 40M
8224	*C.N.C. MACHINING	1.0	40S 40E 40M
8225	*APPLIED MACHINING TECH	1.0	40S 40E 40M
8226	*ADVANCED C.N.C.	1.0	40S 40E 40M

Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017.

.5	15S 15E 15M
1.0	10S 10E 10M
1.0	20S 20E 20M
1.0	30S 30E 30M
1.0	30S 30E 30M
1.0	30S 30E 30M
1.0	40S 40E 40M
	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

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Code	Description	Credits	Grade/Level
	HNOLOGY EDUCATION HNICAL VOCATIONAL		(cont'd)
	MINING ENGINEERING TECH	NOLOGY/	MINERAL SCIENCE
8267	*SOLAR SYSTEM	1.0	20S 20E 20M
8268	*SURVEYING LEVELS	1.0	20S 20E 20M
Note	: The 2016-2017 school year is the final	year for	reporting the courses
that	have an asterisk next to them. These cod	les will	end August 31, 2017.
8269	ROCKS AND FOSSILS	1.0	30S 30E 30M
8270	SURVEY TRANSITS	1.0	30S 30E 30M
8271	INTRO TO CHEMICAL ENGINEERING	1.0	30S 30E 30M
8272	GEOLOGIC PROCESSES	1.0	40S 40E 40M
8273	APPLIED SURVEYING	1.0	40S 40E 40M
8274	INTRO TO CIVIL ENGINEERING	1.0	40S 40E 40M
8275	APPLIED MINERAL SCIENCE	1.0	40S 40E 40M
9145	INTRODUCTION TO MINING ENGINEERING	.5	15S 15E 15M
		1.0	10S 10E 10M
9146	MINING ENGINEERING TECHNOLOGY	1.0	20S 20E 20M
9147	DRAFTING FOR MINING ENGINEERING	1.0	30S 30E 30M
9148	GEOLOGICAL ENGINEERING	1.0	30S 30E 30M
9149	SURVEYING FOR MINING ENGINEERING	1.0	30S 30E 30M
9152	ADVANCED GEOLOGICAL ENGINEERING9152	1.0	40S 40E 40M
9153	MINERAL PROCESSING	1.0	40S 40E 40M
9154	ADV. SURVEYING FOR MINING ENGINEERING	1.0	40S 40E 40M
9155	APPLIED MINING ENGINEERING	1.0	40S 40E 40M
	NAIL TECH	HNOLOGY	
8761	*ARTIFICIAL NAILS	1.0	40S 40E 40M
8762	*PRACTICE & STUDY OF NAILS	1.0	40S 40E 40M
	: The 2016-2017 school year is the final have an asterisk next to them. These cod	-	
9065	MANICURE AND PEDICURE TREATMENTS	1.0	30S 30E 30M
	ARTIFICIAL NAILS	1.0	40S 40E 40M
9067	APPLIED NAIL TECHNOLOGY	1.0	40S 40E 40M
Note	: 9063 Exploration of Esthetics and 9064	Introduc	tion to Esthetics

are also part of Nail Technology.

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Code Description

TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL

(cont'd)

#### PLUMBING AND PIPE TRADES

Credits

**Grade/Level** 

1.0 40S 40E 40M

8859 EXPLORATION PLUMBING PIPE TRADES	.5	15S 15E 15M						
	1.0	10S 10E 10M						
8876 INTRODUCTION PLUMBING PIPE TRADES	1.0	20S 20E 20M						
8877 INTRO PIPING SYSTEMS & THEORIES	1.0	30S 30E 30M						
8878 INSTALL PLUMBING & PIPING SYSTEMS I	1.0	30S 30E 30M						
8879 INSTALL PLUMBING & PIPING SYSTEMS II	1.0	30S 30E 30M						
8981 SANITARY VENTING SYSTEMS 8982 SANITARY DRAINAGE SYSTEMS	1.0	40S 40E 40M						
8982 SANITARY DRAINAGE SYSTEMS	1.0	40S 40E 40M						
8984 INSTALL PLUMBING & PIPING SYSTEMS III	1.0	40S 40E 40M						
8985 APPLIED PLUMBING & PIPING SYSTEMS	1.0	40S 40E 40M						
<b>REFRIGERATION AND AIR CONDITIONING</b>								
8331 *EVAPORATORS	1.0	40S 40E 40M						
8332 *CONDENSERS	1.0	40S 40E 40M						
	1.0	40S 40E 40M						
8334 *APPLIED CONTROLS SERVICE	1.0	40S 40E 40M						
Note: The 2016-2017 school year is the final year	ar for	reporting the courses						
that have an asterisk next to them. These codes	will $\epsilon$	end August 31, 2017.						
8986 EXPLORATION REFRIGERATION AIR COND	.5	15S 15E 15M						
	1.0	10S 10E 10M						
8987 INTRO REFRIGERATION AIR COND	1.0	20S 20E 20M						
8988 SYSTEM FUNDAMENTALS 8989 PIPING FUNDAMENTALS 8991 ELECTRICAL FUNDAMENTALS	1.0	30S 30E 30M						
8989 PIPING FUNDAMENTALS	1.0	30S 30E 30M						
8991 ELECTRICAL FUNDAMENTALS	1.0	30S 30E 30M						
	1.0	40S 40E 40M						
8995 REFRIGERATION & AIR COOLING SYSTEMS	1.0	40S 40E 40M						

8997 APPLIED REFRIGERATION AIR COND

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Code Description

Credits Grade/Level

# TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL

(cont'd)

#### **RESOURCES AND ENVIRONMENTAL MANAGEMENT**

8340	INTRO TO RESOURCE MANAGEMENT	1.0	10S	10E	10M
8341	INTRO TO RESOURCE MANAGEMENT	.5	15S	15E	15M
8342	WOODS ORIENTATION	1.0	20S	20E	20M
8343	MAPPING AND SURVEYING	1.0	40S	40E	40M
8344	ECOLOGY AND FIELD BIOLOGY	1.0	30S	30E	30M
8345	HABITAT MANAGEMENT	1.0	30S	30E	30M
8346	SILVICULTURE	1.0	30S	30E	30M
8347	FOREST MANAGEMENT	1.0	30S	30E	30M
8348	ADVANCED FOREST MANAGEMENT	1.0	40S	40E	40M
8349	WILDLIFE MANAGEMENT	1.0	40S	40E	40M
8350	FISHERIES MANAGEMENT	1.0	40S	40E	40M
8351	HYDROLOGY	1.0	40S	40E	40M
8352	BIOSTATISTICAL ANALYSIS	1.0	40S	40E	40M
8353	APPLIED RESOURCE MANAGEMENT	1.0	40S	40E	40M
8354	BOTANY	1.0	30S	30E	30M
8355	GEOGRAPHICAL INFORMATION SYSTEMS	1.0	40S	40E	40M
8356	ADV. GEOGRAPHICAL INFORMATION SYSTEMS	1.0	40S	40E	40M
8357	PRECISION LAND MANAGEMENT	1.0	30S	30E	30M

#### SKIN CARE TECHNOLOGY

8114	*ADVANCED SKIN CARE	1.0	40S	40E	40M	
8122	*MAKE-UP ARTISTRY	1.0	40S	40E	40M	
8123	*APPLIED ESTHETICS	1.0	40S	40E	40M	

Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017.

9063	EXPLORATION OF ESTHETICS	.5	15S	15E	15M
		1.0	10S	10E	10M
9064	INTRODUCTION TO ESTHETICS	1.0	20S	20E	20M
9068	BASIC SKIN CARE	1.0	30S	30E	30M
9069	INTERMEDIATE SKIN CARE	1.0	30S	30E	30M
9074	ADVANCED SKIN CARE	1.0	30S	30E	30M
9075	APPLIED SKIN CARE	1.0	40S	40E	40M
9076	HAIR REMOVAL	1.0	40S	40E	40M
9077	MAKE-UP ARTISTRY	1.0	40S	40E	40M
9078	SPA SERVICES	1.0	40S	40E	40M

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Code Description

Credits Grade/Level

## **TECHNOLOGY EDUCATION TECHNICAL VOCATIONAL**

(cont'd)

#### SUSTAINABLE ENERGY

8232	EXPLORATION OF SUSTAINABLE ENERGY	.5	15S	15E	15M
		1.0	10S	10E	10M
8233	INTRODUCTION TO SUSTAINABLE ENERGY	1.0	20S	20E	20M
8234	SUSTAINABLE ENERGY: ELECTRICAL SYSTEMS	1.0	30S	30E	30M
8245	SUSTAINABLE ENERGY: HEATING/COOLING SY:	1.0	30S	30E	30M
8246	SUSTAINABLE ENERGY: TRANSPORTATION SYS	1.0	30S	30E	30M
8279	SUSTAINABLE ENERGY SOLAR SYSTEMS	1.0	40S	40E	40M
8292	SUSTAINABLE ENERGY WIND SYSTEMS	1.0	40S	40E	40M
8293	SUSTAINABLE ENERGY BIOMASS SYSTEMS	1.0	40S	40E	40M
8294	*SUSTAINABLE ENERGY APPLIED SYSTEMS	1.0	40S	40E	40M

Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017.

9175 CURRENT TOPICS IN SUSTAINABLE ENERGY 1.0 40S 40E 40M

#### WELDING TECHNOLOGY/WELDING

8369	*ADVANCED ARC WELDING	1.0	40S	40E	40M	
8370	*ADVANCED M.I.G.	1.0	40S	40E	40M	
8371	*PROJECTS AND TESTING	1.0	40S	40E	40M	
8372	*APPLIED WELDING	1.0	40S	40E	40M	
8373	*APPLIED SPECIALTIES	1.0	40S	40E	40M	

Note: The 2016-2017 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2017.

8377 EXPLORATION OF WELDING TECHNOLOGY	.5	15S 15E 15M
	1.0	10S 10E 10M
8378 INTRODUCTION TO WELDING TECHNOLOGY	1.0	20S 20E 20M
8414 METAL DESIGN FABRICATION OXY-ACET	1.0	30S 30E 30M
8474 BASIC GMAW (MIG) PROCEDURES	1.0	30S 30E 30M
8486 BASIC SMAW (ARC) PROCEDURES	1.0	30S 30E 30M
8487 ADVANCED GMAW (MIG) PROCEDURES	1.0	40S 40E 40M
8488 ADVANCED SMAW (ARC) PROCEDURES	1.0	40S 40E 40M
8489 ADVANCED METAL DESIGN/FABRICATION	1.0	40S 40E 40M
8503 APPLIED SPECIALTIES & QUALIFICATIONS	1.0	40S 40E 40M

7997 APPLIED TECHNOLOGY

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Code	Description	Credits	Grad	e/Lev	el					
TEC	HNOLOGY EDUCATION									
	USTRIAL ARTS									
0214	COMPREHENSIVE-TECHNOLOGY EDUCATION	.5	15G	15E	15M					
	CONSTRUCTION	.0	6	7	8					
	DRAFTING	.0	6	7	8					
0361	ELECTRICITY/ELECTRONICS	.0	6	7	8					
0611	METALWORK	.0	6	7	8					
0613	MANUFACTURING	.0	6	7	8					
0732	POWER MECHANICS	.0	6	7	8					
0733	PLASTICS	.0	6	7	8					
0734	POWER/ENERGY	.0	6	7	8					
	WOODWORK	.0	6	7	8					
	AUTOMOTIVE	TECHNOL	ocv							
7965	POWER MECHANICS TECHNOLOGY	1.0						20M	30S	30G
					40S					
	POWER MECHANICS TECHNOLOGY	.5			15M	25G	25E	25M		
7997	APPLIED TECHNOLOGY	1.0	40S	40E	40M					
	DESIGN DRAFT	ING/DRAF	TING							
7952	DRAFTING DESIGN TECHNOLOGY	.5	15G	15E	15M	25G	25E	25M		
7953	DRAFTING DESIGN TECHNOLOGY	1.0	10G	10E	10M	20G	20E	20M	30S	30G
			30E	30M	40S	40G	40E	40M		
7997	APPLIED TECHNOLOGY	1.0	40S	40E	40M					
	ELECTRONICS TECHN		ГСТР	ONIC	re					
	ELECTRICITY/ELECTRONICS TECHNOLOGY	.5			15M					
7974	ELECTRICITY/ELECTRONICS TECHNOLOGY	1.0						20M	30S	30G
					40S	40G	40E	40M		
7997	APPLIED TECHNOLOGY	1.0	40S	40E	40M					
	GRAPHIC COM	IMUNICATI	IONS							
0443	GRAPHIC ARTS	.0	6	7	8					
0444	GRAPHIC COMMUNICATIONS	.0	6	7	8					
	GRA	PHICS								
7050			100	100	1.016	200	007	0.014	200	200
/958	GRAPHIC COMMUNICATION TECHNOLOGY	1.0							305	30G
7050	CRADULE COMMUNICATIONS PRODUCT ON	.5			40S					
		.5				25G	ZDE	∠5M		
1991	APPLIED TECHNOLOGY		405	<b>4</b> 0比	4UΜ					
	METAI	LWORK								
7980	METALWORK TECHNOLOGY	1.0	10G	10E	10M	20G	20E	20M	30S	30G
			30E	30M	40S	40G	40E	40M		
7981	METALWORK TECHNOLOGY	.5	15G	15E	15M	25G	25E	25M		
				40-						

1.0 40S 40E 40M

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Code Description	on
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Credits Grade/Level

# TECHNOLOGY EDUCATION INDUSTRIAL ARTS

## (cont'd)

WOODWORK										
7990	WOODWORK TECHNOLOGY	1.0 10G	10E	10M	20G	20E	20M	30S	30G	
		30E	30M	40S	40G	40E	40M			
7991	WOODWORK TECHNOLOGY	.5 15G	15E	15M	25G	25E	25M			
7994	CONSTRUCTION TECHNOLOGY	1.0 40S	40G	40E	40M					
7995	FURNITURE DESIGN TECHNOLOGY	1.0 40S	40G	40E	40M					
7996	MANUFACTURING TECHNOLOGY	1.0 40S	40G	40E	40M					
7997	APPLIED TECHNOLOGY	1.0 40S	40E	40M						

