

Subject Table Handbook Technology Education

Student Records System
and Professional School
Personnel System

September 2018–August 2019

**SUBJECT TABLE HANDBOOK
TECHNOLOGY EDUCATION**

Student Records System and Professional School Personnel System

Effective September 1, 2018 to August 31, 2019

2018

Manitoba Education and Training

Subject Table Handbook Technology Education Student Record System and Professional School Personnel System. (Effective September 1, 2018 to August 31, 2019)

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INTRODUCTION

PURPOSE

The purpose of the *Subject Table Handbook: Technology Education* is to support schools in the 2018-2019 school years 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 Manitoba Education and Training and for those approved or registered by the Department

A new edition of the *Subject Table Handbook* is provided for 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 2017-June 2018 Subject Table Handbook for reporting 2017-2018 student marks in the summer and fall of 2018.**

This edition of the *Subject Table Handbook: Technology Education* is in effect from September 1, 2018 to August 31, 2019 and is available online at <http://www.edu.gov.mb.ca/k12/docs/policy/sthte/index.html>. 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 Manitoba Education and Training for 1 credit
 - 5 - developed by Manitoba Education and Training for ½ credit
 - 1 - developed by schools or school divisions and registered by Manitoba Education and Training (includes SICs and SIPs)
 - 2 - externally developed by an educational authority and, in the case of dual credit, a post-secondary institution (e.g., university, out-of-country).

- **Third Character**
 - G - General
 - F - Foundation
 - S - Specialized
 - E - EAL
 - M - Modified
 - I - Individualized
 - C - College-based
 - U - University-based

Course Designations

- 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). When a subject area is compulsory for graduation and there is only one course option, the designation will be F.
- General (G):** General educational experiences for all students. The G designation will be retained for Independent Study and Teacher-Mediated courses in all areas until these courses are revised. 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). Applied Commerce Education courses at Grade 10-12 and Technical Vocational 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.

NOTE: Students in individualized programming do not use Education and Training curricula. The designation indicates student participation in individualized programming. **For example**, 11I indicates year one of student participation in locally developed programming individualized for the student; 71I indicates year seven of such participation.

College-based (C): Post-Secondary courses that can be recognized for dual credit at the Grade 12 level (and in some cases, at the Grade 11 level) and also for the first year of college. These courses count towards fulfilling the credit requirements for high school graduation.

University-based (U): Post-secondary courses that can be recognized for dual credit at the Grade 12 level and also for the first year of university. These courses count towards fulfilling the credit requirements for high school graduation.

Partnerships: Some Technical Vocational Programs may be offered in partnership with post-secondary institutions. Schools are required to request approval from Manitoba Education and Training to ensure proper course codes, 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: 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.

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 Vocational (15S) Grade 9, developed or approved by Education and Training for ½ 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 Clothing, Housing and Design(25G)Grade 10, developed or approved by Education and Training for ½ 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.

GRANTING OTHER CREDITS FOR SENIOR YEARS

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.

COMMUNITY SERVICE STUDENT-INITIATED PROJECT (CSSIP)

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: http://www.edu.gov.mb.ca/k12/policy/sics_sips.html

CULTURAL EXPLORATION STUDENT-INITIATED PROJECT (CESIP)

Students can gain valuable educational experience by enhancing their knowledge of their own cultural origins or a cultural group that interests them through interaction with community members such as Elders and members of cultural organizations. The skills, knowledge and attitudes obtained from such activities can increase a student's self-esteem and maturity, strengthen cultural identity and/or provide greater intercultural understanding and an appreciation of cultural diversity. One credit may be available to a student who participates in such activity in the senior years for graduation purposes and does not require departmental registration.

Additional information is available

http://www.edu.gov.mb.ca/k12/policy/gradreq/docs/culture_guidelines.pdf

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 <http://www.edu.gov.mb.ca/k12/dl/index.html>.

In-Province Courses: In-Province Courses: The course codes for in-province compulsory and optional distance learning courses that are based on Department curricula are the same codes that are used for in-class instruction e.g. 0092 ELA: A Comprehensive Focus 40S.

Out-of-Province Courses: The distance learning optional courses delivered by an out-of-province educational authority are the same as those for any non-Manitoba credits. See http://www.edu.gov.mb.ca/k12/docs/policy/op_credits/index.html for information on granting non-Manitoba credits.

RECOGNIZING POST-SECONDARY COURSES FOR DUAL CREDIT

Post-secondary courses can be offered to students while they are attending high school or an Adult Learning Centre. Upon the successful completion of a post-secondary course, a student earns a postsecondary credit which counts towards fulfilling the credit requirements for high school graduation. Final grades are reported on the provincial report card as Complete or Incomplete, and upon successful completion, reported to the Department as Standing ('S'). For more information, see www.edu.gov.mb.ca/k12/policy/gradreq/alt_credits.html

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

School-Initiated Courses (SICs) and Student-Initiated Projects (SIPs) information is available at <http://www.edu.gov.mb.ca/k12/docs/support/ldc/> 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 <http://www.edu.gov.mb.ca/k12/docs/policy/lancredits/index.html>.

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's mark for Biology 40S would 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 and does not count towards the required courses for TVE program funding. The eight courses developed from Grades 10 to 12 forms the foundation courses within the specific cluster. School divisions/districts are eligible for a categorical grant of \$5,500.00 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 (TVE) 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. The grade 9 exploration credit does not count towards the requirements for TVE program funding.

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.

Human Ecology - Home Economics

Senior Years Home Economics curricula (1988-2004) provides full and half credits for Grades 9 and 10. Curriculums for Grades 11 and 12 courses are designated as full credits. Voluntary implementation for the Senior Years Human Ecology Framework of Outcomes takes place in 2018-2019 half and full credit courses in all of the areas of study. All courses are eligible for unit-credit funding. Details are found in Appendix D.

Applied Commerce Education/Business Education and Marketing Education

Applied Commerce Education (ACE) courses are eligible for program support when a series of eight courses are offered and all eligibility requirements are met. The ACE program has replaced the Business Education and Marketing Education courses. 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

<http://www.edu.gov.mb.ca/k12/finance/schfund/index.html>

Appendix A: 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

I	Aircraft Maintenance Technology
I	Automotive Technology (previously Power Mechanics)
I	Aviation and Aerospace Technologies (previously Metals and Aerospace Technologies)
I	Baking and Pastry Arts
I	Broadcast Media Technology (previously Radio and Television Broadcasting, and Electronic Communications)
I	Cabinet and Furniture Making
I	Carpentry (previously Building Construction)
I	Child Care
I	Collision Repair and Refinishing Technology (previously Auto Body Repair)
I	Culinary Arts (previously Food Services)
I	Dental Assisting
I	Dental Technology
II	Design Drafting (previously Drafting)
I	Electrical Trades Technology (previously Electricity)
I	Electronics Technology (previously Electronics)
II	Fashion Design and Technology
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	Interactive Digital Media (previously Microcomputer Systems Technology)
I	Jewellery and Metalsmithing (previously Jewellery Arts)
I	Machining Technology (previously Machine Shop)
I	Mining Engineering Technology (previously Mineral Science)
I	Nail Technology (should include Skin Care Technology for Esthetics)
I	Networking and 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.).

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

Category II

Appendix C: Industrial Arts
(This group is eligible for unit-credit funding only)

Category I

Code	Unit-Credit Title	Course Number			
7959	Graphic Communication Technology	15G	25G		
7958	Graphic Communication Technology	10G	20G	30G	40G
				30S	40S
7973	Electricity/Electronics Technology	15G	25G		
7974	Electricity/Electronics Technology	10G	20G	30G	40G
				30S	40S
7966	Power Mechanics Technology	15G	25G		
7965	Power Mechanics Technology	10G	20G	30G	40G
				30S	40S
7981	Metalwork Technology	15G	25G		
7980	Metal work Technology	10G	20G	30G	40G
				30S	40S
7991	Woodwork Technology	15G	25G		
7990	Woodwork Technology	10G	20G	30G	40G
				30S	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 Number			
7952	Drafting Design Technology	15G	25G		
7953	Drafting Design Technology	10G	20G	30G	40G
				30S	40S
7997	Applied Technology (Drafting)				40S

Appendix D: Home Economics/ Human Ecology

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

Category II

Code	Unit-Credit Title	Course Number			
1118	Family Studies*	10F	20F	30F	40F
				30S	40S
0485	Family Studies*	15F	25F		
1109	Clothing, Housing, and Design*	10G	20G	30G	40G
				30S	40S
0483	Clothing, Housing, and Design*	15G	25G		
1119	Food and Nutrition*	10G	20G	30G	40G
				30S	40S
0484	Food and Nutrition*	15G	25G		
0482	Home Economics*	10G	15G	20G	25G
				30G	40G

Note: The 2018-2019 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31st, 2019. Please see page 2 for new course codes.

Appendix E: Applied Commerce Education/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 five optional credits.



A Grade 11 Social Studies credit is now compulsory for the Senior Year Technology Education Program graduation diploma.

Diploma Requirements	Credits Required for Graduation
Compulsory Credits	17
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, 10, and 11)	3
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 5
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:

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Telephone 204-945-7947 or Toll free 1-800-282-8069 (Ext. 7947)
Fax 204-948-2344
Email kim.poirier@gov.mb.ca

For clarification regarding technical information, please contact:

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

Code	Description	Credits	Grade/Level
TECHNOLOGY EDUCATION APPLIED COMMERCE EDUCATION			
0309	ACCOUNTING ESSENTIALS	1.0	30S 30E 30M
0310	ACCOUNTING SYSTEMS	1.0	40S 40E 40M
0311	APPLIED BUSINESS TECHNOLOGIES	1.0	40S 40E 40M
0314	BUSINESS COMMUNICATIONS	1.0	30S 30E 30M
0315	BUSINESS INNOVATIONS	1.0	10S 10E 10M
0316	BUSINESS MANAGEMENT	1.0	40S 40E 40M
0317	CREATIVE PROMOTIONS	1.0	20S 20E 20M
0318	ECONOMIC PRINCIPLES	1.0	40S 40E 40M
0319	ENTREPRENEURSHIP	1.0	20S 20E 20M
0323	MARKETING AND DIGITAL COMMERCE	1.0	40S 40E 40M
0324	PERSONAL FINANCE	1.0	20S 20E 20M
0325	RETAILING PERSPECTIVES	1.0	30S 30E 30M
0326	TOPICS AND TRENDS IN BUSINESS	1.0	40S 40E 40M
0327	VENTURE DEVELOPMENT	1.0	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

Code	Description	Credits	Grade/Level
TECHNOLOGY EDUCATION			
HUMAN ECOLOGY			
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
0486	HUMAN ECOLOGY	.0	5 6 7 8
		1.0	10S 10E 10M 20S 20E 20M 30S 30E 30M 40S 40E 40M
Note: Individual students may not receive credit for both 0482 AND 0486 for the same grade level.			
0487	FAMILY STUDIES	.5	15S 15E 15M 25S 25E 25M 35S 35E 35M 45S 45E 45M
		1.0	10S 10E 10M 20S 20E 20M 30S 30E 30M 40S 40E 40M
Note: Individual students may not receive credit for both 1118 or 0485 AND 0487 for the same grade level.			
0488	TEXTILE ARTS AND DESIGN	.5	15S 15E 15M 25S 25E 25M 35S 35E 35M 45S 45E 45M
		1.0	10S 10E 10M 20S 20E 20M 30S 30E 30M 40S 40E 40M
Note: Individual students may not receive credit for both 1109 or 0483 AND 0488 for the same grade level.			
0489	FOOD AND NUTRITION	.5	15S 15E 15M 25S 25E 25M 35S 35E 35M 45S 45E 45M
		1.0	10S 10E 10M 20S 20E 20M 30S 30E 30M 40S 40E 40M
Note: Individual students may not receive credit for both 1119 or 0484 AND 0489 for the same grade level.			
0490	ENVIRONMENTAL DESIGN	.5	35S 35E 35M 45S 45E 45M
		1.0	30S 30E 30M 40S 40E 40M
Note: Individual students may not receive credit for both 1109 or 0483 AND 0490 for the same grade.			
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

Code Description Credits Grade/Level

**TECHNOLOGY EDUCATION
HUMAN ECOLOGY**

(cont'd)

1119	*FOOD AND NUTRITION	1.0	10G 10E 10M 20G 20E 20M 30S 30G 30E 30M 40S 40G 40E 40M
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Note: The 2018-2019 school year is the final year for reporting the courses that have a single asterisk next to them. These codes will end August 31, 2019.

Code	Description	Credits	Grade/Level
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**TECHNOLOGY EDUCATION
TECHNICAL VOCATIONAL**

BROADCAST MEDIA TECHNOLOGY/ELECTRONIC COMMUNICATIONS

8479	*RESEARCH, WRITE AND PERFORM	1.0	30S 30E 30M
8480	*TELEVISION PRODUCTION	1.0	30S 30E 30M
8481	*PROGRAMMING FOR RADIO	1.0	30S 30E 30M

Note: The 2018-2019 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2019.

8482	QUALITY CONTROL	1.0	40S 40E 40M
8483	MEDIA LITERACY	1.0	40S 40E 40M
8484	BROADCASTING REGULATIONS	1.0	40S 40E 40M
8485	APPLIED ELEC. COMMUNICATIONS	1.0	40S 40E 40M

BROADCAST MEDIA TECHNOLOGY/RADIO AND TELEVISION BROADCASTING

8620	*ADVANCED BROADCASTING	1.0	40S 40E 40M
8621	*ADVANCED EQUIPMENT	1.0	40S 40E 40M
8622	*ADVANCED SCRIPTING	1.0	40S 40E 40M
8623	*ADVANCED PRODUCTION	1.0	40S 40E 40M

Note: The 2018-2019 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2019.

9114	EXPLORATION OF BROADCAST MEDIA TECH.	.5	15S 15E 15M
		1.0	10S 10E 10M
9116	INTRO. TO BROADCAST MEDIA TECHNOLOGY	1.0	20S 20E 20M
9117	MULTI-CAMERA PRODUCTION FOR BROADCAST	1.0	30S 30E 30M
9118	VIDEO POST-PRODUCTION FOR BROAD. MEDIA	1.0	30S 30E 30M
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

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

Code Description Credits Grade/Level

**TECHNOLOGY EDUCATION
TECHNICAL VOCATIONAL**

(cont'd)

DESIGN DRAFTING

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

ELECTRONICS TECHNOLOGY

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

FASHION DESIGN AND TECHNOLOGY

8499	*DESIGN APPLICATIONS	1.0	40S	40E	40M
8500	*MACHINE KNITTING	1.0	40S	40E	40M
8501	*FASHION ENTREPRENEURSHIP	1.0	40S	40E	40M
8502	*APPLIED FASHION TECH	1.0	40S	40E	40M

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9124	EXPLORATION OF FASHION DESIGN & TECH.	.5	15S	15E	15M
		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

Code	Description	Credits	Grade/Level
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**TECHNOLOGY EDUCATION
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(cont'd)

GRAPHIC DESIGN/ADVERTISING ART

8379	*GAME DESIGN & DEVELOPMENT	1.0	40S 40E 40M
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	1.0	40S 40E 40M
8393	*APPLIED ADVERTISING ART	1.0	40S 40E 40M
8394	*L.I. TECH INITIATIVE	1.0	40S 40E 40M
8395	*ANIMATION	1.0	40S 40E 40M
8396	*DIGITAL IMAGING	1.0	40S 40E 40M

Note: The 2018-2019 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2019.

9135	EXPLORATION OF GRAPHIC DESIGN	.5	15S 15E 15M
		1.0	10S 10E 10M
9136	FUNDAMENTALS OF GRAPHIC DESIGN	1.0	20S 20E 20M
9137	GRAPHIC DESIGN AND LAYOUT	1.0	30S 30E 30M
9138	ILLUSTRATION FOR GRAPHIC DESIGN	1.0	30S 30E 30M
9139	INTERACTIVE GRAPHIC DESIGN	1.0	30S 30E 30M
9140	ADV. GRAPHIC DESIGN AND LAYOUT	1.0	40S 40E 40M
9141	ADV. ILLUSTRATION FOR GRAPHIC DESIGN	1.0	40S 40E 40M
9142	ADV. INTERACTIVE GRAPHIC DESIGN	1.0	40S 40E 40M
9144	GRAPHIC DESIGN PORTFOLIO	1.0	40S 40E 40M

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

Code Description Credits Grade/Level

**TECHNOLOGY EDUCATION
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(cont'd)

JEWELLERY AND METALSMITHING

8768	EXPLOR OF JEWELLERY METALSMITHING	.5	15S 15E 15M
		1.0	10S 10E 10M
8769	INTRO JEWELLERY METALSMITHING	1.0	20S 20E 20M
8799	LOST WAX CASTING	1.0	30S 30E 30M
8814	BASIC CONSTRUCTION AND SOLDERING	1.0	30S 30E 30M
8823	FORGING AND FORMING	1.0	30S 30E 30M
8824	JEWELLERY REPAIR	1.0	40S 40E 40M
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 AUTHORIZING	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
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	1.0	40S 40E 40M
8964	*INTERMEDIATE WEB AUTHORIZING	1.0	40S 40E 40M
8976	*NETWORKING TECHNOLOGY IV	1.0	40S 40E 40M
8978	*DATABASE FUNDAMENTALS & MS ACCESS	1.0	40S 40E 40M

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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

Code Description Credits Grade/Level

**TECHNOLOGY EDUCATION
TECHNICAL VOCATIONAL**

(cont'd)

PHOTOGRAPHY

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

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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. PHOTOGRAPHIC 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

PRINT MEDIA

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

PRODUCTION ART

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

Note:: The 2018-2019 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2019.

Code Description Credits Grade/Level

**TECHNOLOGY EDUCATION
TECHNICAL VOCATIONAL**

(cont'd)

SOUND ENGINEERING/AUDIO RECORDING PRODUCTION AND PERFORMANCE

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
8432	*INTERMEDIATE RECORDING TECHNOLOGY	1.0	30S	30E	30M
8433	*ADVANCED RECORDING TECHNOLOGY	1.0	40S	40E	40M

Note: The 2018-2019 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2019.

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 PRODUCTION	1.0	40S	40E	40M
9172	ADV. SOUND ENGINEERING FOR LIVE PERFORMANCE	1.0	40S	40E	40M
9173	APPLIED SOUND ENGINEERING	1.0	40S	40E	40M

Code	Description	Credits	Grade/Level
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**TECHNOLOGY EDUCATION
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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

8695	INTRODUCTION TO AUTOMOTIVE TECHNOLOGY	.5	15S 15E 15M
		1.0	10S 10E 10M
8696	AUTOMOTIVE SYSTEMS AND SERVICE	1.0	20S 20E 20M
8697	ENGINE FUNDAMENTALS AND SERVICE	1.0	30S 30E 30M
8698	CHASSIS FUNDAMENTALS AND SERVICE	1.0	30S 30E 30M
8699	DRIVETRAIN FUNDAMENTALS AND SERVICE	1.0	30S 30E 30M
8700	AUTOMOTIVE ELECTRICAL SYSTEMS	1.0	40S 40E 40M
8701	VEHICLE SYSTEMS PART 1	1.0	40S 40E 40M
8702	VEHICLE SYSTEMS PART 2	1.0	40S 40E 40M
8703	APPLIED DIAGNOSTIC STRATEGIES	1.0	40S 40E 40M

AVIATION AND AEROSPACE TECHNOLOGIES

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

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

CARPENTRY

8584	INTRODUCTION TO CARPENTRY	.5	15S	15E	15M
		1.0	10S	10E	10M
8585	CARPENTRY FUNDAMENTALS	1.0	20S	20E	20M
9188	CARPENTRY TOOLS AND EQUIPMENT	1.0	30S	30E	30M
9189	FRAMING	1.0	30S	30E	30M
9190	INTERIOR/EXTERIOR FINISHING	1.0	30S	30E	30M

Note: Individual students may not receive credit 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 receive credit for both 9192 and 8589.

9193	CARPENTRY MILLWORK	1.0	40S	40E	40M
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Note: Individual students may not receive credit for both 9193 and 8592.

9194	APPLIED CARPENTRY	1.0	40S	40E	40M
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Code Description Credits Grade/Level

**TECHNOLOGY EDUCATION
TECHNICAL VOCATIONAL**

(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	H.S. TECH INITIATIVE	1.0	40S	40E	40M

COLLISION REPAIR & REFINISHING TECHNOLOGY/AUTO BODY REPAIR

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

CULINARY ARTS

8790	EXPLORATION OF THE CULINARY ARTS	.5	15S	15E	15M
		1.0	10S	10E	10M
8791	COOKING PRINCIPLES	1.0	20S	20E	20M
8792	GARDE MANGER	1.0	30S	30E	30M
8793	PATISSERIE AND BAKING	1.0	30S	30E	30M
8794	VEG, FUNGI, STARCHES & FARINACEOUS PROI	1.0	30S	30E	30M
8795	STOCKS, SOUPS AND SAUCES	1.0	40S	40E	40M
8796	BREAKFAST AND DAIRY	1.0	40S	40E	40M
8797	MENU PLANNING AND FOOD COSTING	1.0	40S	40E	40M
8798	MEATS, POULTRY, FISH AND SEAFOOD	1.0	40S	40E	40M

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**TECHNOLOGY EDUCATION
TECHNICAL 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 TECHNOLOGY

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 TECHNOLOGY

9054	EXPLORATION OF ELECTRICAL TRADES TECH.	.5	15S	15E	15M
		1.0	10S	10E	10M
9055	INTRODUCTION TO ELECTRICAL TRADES TECH	1.0	20S	20E	20M
9056	ELECTRICAL TRADES DC FUNDAMENTALS	1.0	30S	30E	30M
9057	RESIDENTIAL WIRING	1.0	30S	30E	30M
9058	ELECTRICAL WIRING METHODS	1.0	30S	30E	30M
9059	ADVANCED RESIDENTIAL WIRING	1.0	40S	40E	40M
9060	ELECTRICAL TRADES AC FUNDAMENTALS	1.0	40S	40E	40M
9061	ADVANCED ELECTRICAL WIRING METHODS	1.0	40S	40E	40M
9062	APPLIED ELECTRICAL TRADES TECHNOLOGY	1.0	40S	40E	40M

ESTHETICS: NAIL TECHNOLOGY

9065	MANICURE AND PEDICURE TREATMENTS	1.0	30S	30E	30M
9066	ARTIFICIAL NAILS	1.0	40S	40E	40M
9067	APPLIED NAIL TECHNOLOGY	1.0	40S	40E	40M

Note: 9063 Exploration of Esthetics and 9064 Introduction to Esthetics are also part of Nail Technology.

Code	Description	Credits	Grade/Level
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**TECHNOLOGY EDUCATION
TECHNICAL VOCATIONAL**

(cont'd)

ESTHETICS: SKIN CARE TECHNOLOGY

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

EXPLORATION OF TECHNICAL VOCATIONAL EDUCATION

9174	EXPLORATION OF TECHNICAL VOCATIONAL ED	.5	15S 15E 15M
		1.0	10S 10E 10M

HAIRSTYLING

8312	INTRODUCTION TO HAIRSTYLING	1.0	20S 20E 20M
8313	BASIC HAIRSTYLING	1.0	20S 20E 20M
8314	BASIC HAIRCUTTING & THERMAL STYLING	1.0	20S 20E 20M
8315	RELATED SALON SERVICES	1.0	20S 20E 20M
8316	INTERMEDIATE HAIRCUTTING & BARBER TECH	1.0	30S 30E 30M
8317	HAIR COLOURING	1.0	30S 30E 30M
8318	INTERMEDT. HAIRSTYLING & ARTIFCL. HAIR	1.0	30S 30E 30M
8319	CHEMICAL TEXTURE SERVICES	1.0	30S 30E 30M
8320	ADVANCED HAIRSTYLING AND COLOURING	1.0	40S 40E 40M
8321	ADVANCED HAIRCUTTING & CHEMICAL TEXTURI	1.0	40S 40E 40M
8322	SALON OPERATION	1.0	40S 40E 40M
8323	CERTIFICATE PREPARATION	1.0	40S 40E 40M
9113	EXPLORATION OF HAIRSTYLING	.5	15S 15E 15M
		1.0	10S 10E 10M

Code	Description	Credits	Grade/Level		
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**TECHNOLOGY EDUCATION
TECHNICAL VOCATIONAL**

(cont'd)

HEALTH CARE ASSISTANT CVE

8800	INTRO TO HEALTH CARE ASSISTANT	1.0	10S	10E	10M
8801	INTRO TO HEALTH CARE ASSISTANT	.5	15S	15E	15M
8802	THE LIFE CYCLE	1.0	40S	40E	40M
8803	HUMAN RELATIONS	1.0	40S	40E	40M
8804	SAFETY IN HEALTH CARE	1.0	40S	40E	40M
8805	BODY MECHANICS AND MOVEMENT	1.0	40S	40E	40M
8806	NUTRITION AND HYGIENE	1.0	40S	40E	40M
8807	PROCEDURES AND TREATMENTS	1.0	40S	40E	40M
8808	AGING AND RELATED DISORDERS	1.0	40S	40E	40M
8809	LIFE MANAGEMENT	1.0	40S	40E	40M
8810	PALLIATIVE CARE	.5	45S	45E	45M
8811	CONCEPTS FOR PRACTICE	1.0	40S	40E	40M
8812	PERSONAL CARE SKILLS AND NEEDS	1.0	40S	40E	40M
8813	HEALTH & LIFESPAN DEVELOPMENT	.5	45S	45E	45M

HEAVY DUTY EQUIPMENT TECHNICIAN

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

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

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			

MACHINING TECHNOLOGY

8841	EXPLORATION MACHINING TECHNOLOGY	.5	15S	15E	15M			
		1.0	10S	10E	10M			
8842	BENCH METAL	1.0	20S	20E	20M			
8843	DRILL PRESS AND METAL CUTTING SAWS	1.0	30S	30E	30M			
8844	LATHE OPERATIONS AND GRINDING I	1.0	30S	30E	30M			
8854	MILLING OPERATIONS I	1.0	30S	30E	30M			
8855	LATHE OPERATIONS AND GRINDING II	1.0	40S	40E	40M			
8856	MILLING OPERATIONS II	1.0	40S	40E	40M			
8857	APPLIED MACHINING MANUFACTUR TECH	1.0	40S	40E	40M			
8858	CNC MACHINING	1.0	40S	40E	40M			

Code	Description	Credits	Grade/Level		
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**TECHNOLOGY EDUCATION
TECHNICAL VOCATIONAL**

(cont'd)

MINING ENGINEERING TECHNOLOGY/MINERAL SCIENCE

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

Note: The 2018-2019 school year is the final year for reporting the courses that have an asterisk next to them. These codes will end August 31, 2019.

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

PLUMBING AND PIPE TRADES

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	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

REFRIGERATION AND AIR CONDITIONING

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	1.0	30S	30E	30M
8989	PIPING FUNDAMENTALS	1.0	30S	30E	30M
8991	ELECTRICAL FUNDAMENTALS	1.0	30S	30E	30M
8992	ELECTRICAL CONTROLS	1.0	40S	40E	40M
8995	REFRIGERATION & AIR COOLING SYSTEMS	1.0	40S	40E	40M
8996	HEATING VENTILATION AIR COND SYSTEM	1.0	40S	40E	40M
8997	APPLIED REFRIGERATION AIR COND	1.0	40S	40E	40M

Code	Description	Credits	Grade/Level
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**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
8344	ECOLOGY AND FIELD BIOLOGY	1.0	30S 30E 30M
8347	FOREST MANAGEMENT	1.0	30S 30E 30M
8349	WILDLIFE MANAGEMENT	1.0	40S 40E 40M
8350	FISHERIES MANAGEMENT	1.0	40S 40E 40M
8354	BOTANY	1.0	30S 30E 30M
8355	GEOGRAPHICAL INFORMATION SYSTEMS	1.0	40S 40E 40M

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

WELDING TECHNOLOGY

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

Code	Description	Credits	Grade/Level		
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**TECHNOLOGY EDUCATION
INDUSTRIAL ARTS**

0214	COMPREHENSIVE-TECHNOLOGY EDUCATION	.5	15G	15E	15M
0282	CONSTRUCTION	.0	6	7	8
0321	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
0950	WOODWORK	.0	6	7	8

AUTOMOTIVE TECHNOLOGY

7965	POWER MECHANICS TECHNOLOGY	1.0	10G	10E	10M	20G	20E	20M	30S	30G
			30E	30M	40S	40G	40E	40M		
7966	POWER MECHANICS TECHNOLOGY	.5	15G	15E	15M	25G	25E	25M		
7997	APPLIED TECHNOLOGY	1.0	40S	40E	40M					

DESIGN DRAFTING

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 TECHNOLOGY

7973	ELECTRICITY/ELECTRONICS TECHNOLOGY	.5	15G	15E	15M	25G	25E	25M		
7974	ELECTRICITY/ELECTRONICS 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					

GRAPHIC COMMUNICATIONS

0443	GRAPHIC ARTS	.0	6	7	8
0444	GRAPHIC COMMUNICATIONS	.0	6	7	8

GRAPHICS

7958	GRAPHIC COMMUNICATION TECHNOLOGY	1.0	10G	10E	10M	20G	20E	20M	30S	30G
			30E	30M	40S	40G	40E	40M		
7959	GRAPHIC COMMUNICATIONS TECHNOLOGY	.5	15G	15E	15M	25G	25E	25M		
7997	APPLIED TECHNOLOGY	1.0	40S	40E	40M					

METALWORK

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		
7997	APPLIED TECHNOLOGY	1.0	40S	40E	40M					

Code	Description	Credits	Grade/Level
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**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



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