Nevada
Career and Technical Education
Course Catalog
2025-2026

This document was prepared by:

Office of Career Readiness, Adult Learning, and Education Options
Nevada Department of Education
755 N. Roop Street, Suite 201
Carson City, NV 89701

www.doe.nv.gov

December 1, 2024

Nevada State Board of Education

Dr. René Cantú
Maggie Carlton
Dr. Katherine Dockweiler, Vice President
Tate Else
Stephanie Goodman
Tamara Hudson
Tim Hughes
Michael Keyes
Angela Orr
Felicia Ortiz, President
Mike Walker

Nevada Department of Education

Jhone M. Ebert
Superintendent of Public Instruction

Craig Statucki
Director for the Office of Career Readiness, Adult Learning, and Education Options

Anna Reynolds
Assistant Director for the Office of Career Readiness, Adult Learning, and Education Options

Vision

All Nevada students are equipped and feel empowered to attain their vision of success

Mission

To improve student achievement and educator effectiveness by ensuring opportunities, facilitating learning, and promoting excellence

Table of Contents

Introduction

Purpose

The purpose of the Statewide course catalog for career and technical education (CTE) is to provide a resource that consolidates all secondary CTE courses in Nevada. This catalog shall be used as the sole resource for school districts and public charter schools to determine CTE courses and course sequences for all middle and high schools. This catalog is considered a dynamic resource where new courses may be added through the application process approved by the Nevada Department of Education (NDE or Department) to ensure the following thresholds are met:

- The CTE course and course sequence **teach the knowledge and skills required by industry** through applied learning methodology and, where appropriate, work-based learning experiences that prepare students for careers in high-wage, high-skill, and in-demand occupations. Regional and State economic development priorities shall play an important role in determining program approval. Some courses also provide instruction focused on personal development.
- The CTE course and course sequence **include leadership and employability skills** as an integral part of the curriculum.
- The CTE course and course sequence are **part of a rigorous program of study** and include sufficient technical challenges to meet state and/or industry-standards.

Catalog Organization

Courses are organized according to the National Career Clusters® Framework. Courses within each Career Cluster area include the following elements: (1) Program of Study Description, (2) Program Course Sequences, (3) Course Descriptions, and (4) Course Data Information.

Program Descriptions

Each section begins with a description of the program of study. This description provides a brief explanation of the overall purpose and instructional topics the student will have access to while completing the program of study.

Program Course Sequences

The course sequencing provided in each section serves as a guide to schools to develop programs of study. Completion of the program core sequence is essential for the successful delivery of the Nevada CTE State standards in each program.

The sequencing tables provide the appropriate order of courses in each program of study. Programs are listed alphabetically. Each program identifies: (1) Core Sequence, (2) Complementary Course(s), and (3) State Skill Standards.

> The **core course sequence** identifies the courses listed in the sequential order required for the complete delivery of the State standards for that program. **Each student must progress through the core course sequence and pass each course to reach "completer" status.**
>
> **Complementary courses** are those courses that directly support additional time and instruction of the State standards and must align to a student's program of study. Complementary courses are considered additional courses and do not count as progress toward "completer" status. Complementary courses are not to be used in lieu of the courses in the core sequence for program completion. The use of complementary courses must follow the sequence allowance rules listed below.

Complementary courses may be added to a student's program of study if all the following conditions are met:

- Enrollment in a complementary course is done **after** the completion of the core sequence or as noted in the course description;
- The course relates to the student's program of study;
- The student's schedule allows for additional courses;
- The course is an approved course in the Nevada CTE Course Catalog; and
- Prerequisites of the course are completed.

The **State standards** column identifies the CTE State standards developed for the course sequence. CTE State standards are or will be developed for all programs and will be revised and updated as needed or according to a pre-determined schedule. CTE State standards labeled with "*TBD*" indicates "To Be Developed." The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences. A technical assessment, if available, will be implemented for those programs with current industry validated standards.

Course Descriptions

The **course descriptions** are organized by program then sequence within the program area's Career Cluster and include the course prerequisites and description, with the exception of the common foundational courses. A course description is provided for each course. The descriptions are general and are intended to be used by school districts and schools for their annual catalogs, registration materials, etc. The description may be enhanced as desired at the local level. An example of the Animal Science course is shown below.

Animal Science

Prerequisite: Principles of Agriculture, Food, and Natural Resources

This course is a continuation of Principles of Agriculture, Food, and Natural Resources. This course allows advanced students to expand on skills and knowledge from Principles of Agriculture, Food, and Natural Resources while exploring the livestock and companion animal industries. This course covers the basic anatomy and physiology of domestic animals, genetics, reproduction, animal health and welfare, evaluation and selection of animals, land stewardship, and marketing. An essential part of this course will be leadership activities and Supervised Agricultural Experience Programs. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Course Data Information

The **course data information** is to be used locally exactly as written in this catalog. This is especially important since it is those **course titles, abbreviated names, Classification of Instructional Programs (CIP) Codes, credits, Non-Traditional, and School Courses for the Exchange of Data (SCED) Codes** that will populate the State Infinite Campus System and the System for Accountability Information in Nevada (SAIN). Through accurate use of the course data information, the CTE data reporting will be equally consistent and accurate. Furthermore, the data system will **not** recognize any course data that is inconsistent with those in this catalog and will prohibit the collection and recognition of the CTE course. The following notes on SCED are intended to aid district staff in implementing the data elements included in the CTE Course Catalog. However, for complete information please see the CTE SCED Code Directory released by the CTE Accountability Office as a supplement to the CTE Course Catalog.

The Office of Career Readiness, Adult Learning, and Education Options (CRALEO) is working to phase out the use of course levels as NDE transitions to the use of SCED codes. While the existing course levels are being maintained as districts continue to implement SCED codes, please note that the information is no longer included in the CTE Course Catalog. The same information can be determined using a course's full SCED Code (also entered as State Code in Infinite Campus, e.g., 19151G1.0012F). SCED Codes are made up of four **main** elements:

- Subject Area and Course Number are the first five numbers;
- Course Levels used by CRALEO are "G" (general courses that are core to a sequence), "E" (enhanced courses such as Labs, Advanced Studies, Complementary Courses, and Industry-Recognized Credentials), or "C" (indicating dual credit, dual enrollment, and/or college course);
- Carnegie Unit Credit (provides the number of credits for the entire course); and,
- Sequence of Courses, which indicates the order in which courses should be taught (i.e., a course sequence of "12" indicates that it is the first course in a two-course sequence [L1], while a "22" course is the second course in a two-course sequence [L2C]). This provides similar information to the previously used level codes.

Please review the SCED Directory issued by CRALEO Data staff each year for full codes.

The following notes provide additional guidance about the data elements found in the data tables included in this catalog:

- Lab courses are to be taught concurrently with the associated course (i.e., Multimedia Communications II with Multimedia Communications II Lab) and should appear with a Course Level of "E" and the same sequence as the course they accompany. Please see individual course descriptions for requirements and prerequisites. The Advanced Studies courses allow students to continue taking courses beyond the completion level courses and are repeatable, unless otherwise noted. They should be entered with a Course Level of "E" and a sequence of "11". The Complementary Courses are offered after completion of the program of study with continued instruction in the specific pathway(s). They should be entered with a Course Level "E" and a sequence of "11".
- CTE Work Experience courses should be entered with a Course Level of "G", a sequence of "11" and must follow NAC 389.562, 389.564, and 389.566 regulations.
- CTE is largely defined by courses that are one (1) credit in length.
- The non-traditional column identifies the courses and gender for which individuals from one gender comprise less than 25 percent of the individuals employed in each such career pathway.
- The CIP Codes and SCED Codes are utilized for correctly aligning CTE courses to respective programs of study to ensure accurate state/federal data reporting, allocation funding, assessment rostering, etc.

Summary of Catalog Updates and Revisions

The CTE Course Catalog is updated and presented to the State Board of Education on an annual basis. Courses and course sequences may be added to this catalog only through the application process approved by the Nevada Department of Education.

New Complementary Courses

Complementary courses and their associated program of study are listed below.

Health Science

Community Health Science Complementary Courses

- Behavioral Health and Wellness for Community Health Science

Human Services

Human and Social Services

- Behavioral Health and Wellness for Human and Social Services

Information Technology

Cybersecurity

- Ethical Hacking

Program Alignment for Agriculture, Food, and Natural Resources

This Career Cluster® is focused on the production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products or resources.

- Agricultural Welding, Power, and Structure Technology
- Animal Systems
- Plant Systems

Program Descriptions
Agriculture, Food, and Natural Resources

Agricultural Welding, Power, and Structure Technology

The Agricultural Welding, Power, and Structure Technology program covers the foundational skills necessary for agricultural welding, power, and structural industry employment. Areas of study include general shop safety, basic welding, electrical applications, water management, agricultural drafting and construction, engines and power, basic hydraulics, machinery maintenance and repair, and leadership development.

Animal Systems

The Animal Systems program provides students with the principles of the livestock and red meat industry. Areas of study include the basic anatomy and physiology of domestic animals, genetics, reproduction, animal health and welfare, evaluation and selection of animals, land stewardship, marketing, careers, and leadership development.

Plant Systems

The Plant Systems program provides students with the principles of plant science, ornamental horticulture, floriculture, landscape design, and greenhouse management. Areas of study include safety practices, plant anatomy and physiology, plant identification, plant selection and care, propagation, growing media, nutrition, integrated pest management, plant technologies, growing greenhouse crops, greenhouse business concepts, careers, and leadership development.

Program Course Sequences
Agriculture, Food, and Natural Resources

Program Name	Course Sequence	State Skill Standards*
Agricultural Welding, Power, and Structure Technology	**Core Course Sequence** Agricultural Welding, Power, and Structure Technology I Agricultural Welding, Power, and Structure Technology II **Complementary Course(s)** Agricultural Welding, Power, and Structure Technology II Lab ** Agricultural Welding, Power, and Structure Technology Advanced Studies CTE Work Experience – Agriculture, Food, and Natural Resources Industry-Recognized Credential – Agricultural Welding, Power, and Structure Technology	Agricultural Welding, Power, and Structure Technology
Animal Systems	**Core Course Sequence** Principles of Agriculture, Food, and Natural Resources Animal Science **Complementary Course(s)** Animal Science Advanced Studies Agricultural Business Systems for Animal Systems Agricultural Leadership, Communication, and Policy for Animal Systems Environmental and Natural Resource Management for Animal Systems Food Science Technology for Animal Systems Veterinary Science CTE Work Experience – Agriculture, Food, and Natural Resources Industry-Recognized Credential – Animal Systems	Animal Systems Program of Study with Complementary Course Standards
Plant Systems	**Core Course Sequence** Principles of Agriculture, Food, and Natural Resources Plant Science **Complementary Course(s)** Plant Science Advanced Studies Agricultural Business Systems for Plant Systems Agricultural Leadership, Communication, and Policy for Plant Systems Environmental and Natural Resource Management for Plant Systems Food Science Technology for Plant Systems Greenhouse and Landscape Management CTE Work Experience – Agriculture, Food, and Natural Resources Industry-Recognized Credential – Plant Systems	Plant Systems Program of Study with Complementary Course Standards

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.

Remaining Course Sequences for Sunsetted Programs
Agriculture, Food, and Natural Resources

Applicable State Skill Standards are available on website until final program of study core course is completed. For course descriptions, please see the2023-24 or 2024-25 Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

Program Name	Remaining Course(s) from Sunsetted Program Sequence	State Skill Standards*
Agricultural Mechanics Technology (Sunsetted 2023-24)	**Complementary Course(s)** Agricultural Mechanics Technology Advanced Studies (Last year offered 2025-26)	Agricultural Mechanics Technology

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

Course Descriptions
Agriculture, Food, and Natural Resources

Agricultural Welding, Power, and Structure Technology I

Prerequisite: None

This course will introduce students to the foundational skills necessary for agriculture mechanics and industry employment. Areas of study may include general shop safety, basic welding, electrical applications, water management, agricultural drafting and construction, engines and power, and machinery maintenance and repair. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

Agricultural Welding, Power, and Structure Technology II

Prerequisite: Agricultural Welding, Power, and Structure Technology I

This course is a continuation of Agricultural Welding, Power, and Structure Technology I and allows students to expand on skills and knowledge from Agricultural Welding, Power, and Structure Technology I. Areas of study may include general shop safety, basic welding, electrical applications, water management, agricultural drafting and construction, engines and power, and machinery maintenance and repair. This course provides agriculture students basic instruction in advanced techniques and processes such as electrical controls and maintenance; basic construction and pipe fitting techniques; welding: Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), and plasma cutting; agricultural machinery operation and repair; hydraulics; and electrical power, motor and control systems. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. The appropriate use of technology and industry standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Agricultural Welding, Power, and Structure Technology II LAB

Prerequisite: Concurrent enrollment in Agricultural Welding, Power, and Structure Technology II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Agricultural Welding, Power, and Structure Technology Advanced Studies

Prerequisite: Completion of Agricultural Welding, Power, and Structure Technology Program of Study

This course is offered to students who have completed all content standards in Agricultural Welding, Power, and Structure Technology program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Agricultural Welding, Power, and Structure Technology

Prerequisite: Completion of Agricultural Welding, Power, and Structure Technology Program of Study

This course is offered to students who have completed all content standards in the Agricultural Welding, Power, and Structure Technology program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Agricultural Welding, Power, and Structure Technology Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Animal Science

Prerequisite: Principles of Agriculture, Food, and Natural Resources

This course is a continuation of Principles of Agriculture, Food, and Natural Resources. This course allows advanced students to expand on skills and knowledge from Principles of Agriculture, Food, and Natural Resources while exploring the livestock and companion animal industries. This course covers the basic anatomy and physiology of domestic animals, genetics, reproduction, animal health and welfare, evaluation and selection of animals, land stewardship, and marketing. An essential part of this course will be leadership activities and Supervised Agricultural Experience Programs. The appropriate use of

technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Animal Science Advanced Studies

Prerequisite: Completion of Animal Systems Program of Study

This course is offered to students who have completed all content standards in the Animal Systems program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Agricultural Business Systems for Animal Systems

Prerequisite: Completion of Animal Systems Program of Study

This course is offered to students who have completed all content standards in the Animal Systems program of study. This course provides advanced agriculture students with the information and skills necessary for success in agribusiness and in operating entrepreneurial ventures in the agricultural industry. These courses may cover topics such as economic principles, budgeting, risk management, finance, business law, marketing and promotion strategies, insurance, and resource management. Other possible topics include developing a business plan, employee/employer relations, problem-solving and decision making, commodities, and building leadership skills. These courses may also incorporate a survey of the careers within the agricultural industry. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

Agricultural Leadership, Communication, and Policy for Animal Systems

Prerequisite: Completion of Animal Systems Program of Study

This course is offered to students who have completed all content standards in the Animal Systems program of study. This program provides advanced agriculture students with instruction on leadership and communication skills with a focus on opportunities in the agriculture industries. Topics will include communication research, verbal and written communications, journalism, mass media, agriculture policy and human relations. Other topics may include problem solving and decision making and teamwork skills. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

Environmental and Natural Resource Management for Animal Systems

Prerequisite: Completion of Animal Systems Program of Study

This course is offered to students who have completed all content standards in the Animal Systems program of study. This course introduces advanced agriculture students to concepts of environmental natural resource science and management. This will include ecological concepts and scientific principles related to environmental science, soils, composting and recycling, rangeland management, fire ecology, GPS and GIS, fish and wildlife ecology, forestry, renewable and nonrenewable resources, and fish and wildlife management. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

Food Science Technology for Animal Systems

Prerequisite: Completion of Animal Systems Program of Study

This course is offered to students who have completed all content standards in the Animal Systems program of study. This course allows advanced students to expand on skills and knowledge from Animal Systems program of study while exploring the livestock and meat industry. This course covers the basic anatomy and physiology of domestic animals, genetics, reproduction, animal health and welfare, evaluation and selection of animals, land stewardship and marketing. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Veterinary Science

Prerequisite: Completion of Animal Systems Program of Study

This course is offered to students who have completed all content standards in the Animal Systems program of study. This course is designed to introduce advanced agriculture students to the technical understanding and working knowledge of the veterinary industry. Topics to be covered include practices in the veterinary clinical setting, medical terminology, medical math, clinical examination, laboratory techniques, diseases and disorders, nutrition, clinical and office procedures, and ethical and welfare issues. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Industry-Recognized Credential – Animal Systems

Prerequisite: Completion of Animal Systems Program of Study

This course is offered to students who have completed all content standards in the Animal Systems program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Animal Systems Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Plant Science

Prerequisite: Principles of Agriculture, Food, and Natural Resources

This course is a continuation of Principles of Agriculture, Food, and Natural Resources. This course is designed to introduce the intermediate agriculture student to the skills and knowledge needed in order to successfully grow and care for plants. Areas emphasized include plant anatomy and physiology, plant identification, propagation, growing media, nutrition, and plant technologies. The appropriate use of technology and industry-standard equipment is an integral part of this course. An essential part of this course will be leadership activities and Supervised Agricultural Experience Programs.

Plant Science Advanced Studies

Prerequisite: Completion of Plant Systems Program of Study

This course is offered to students who have completed all content standards in the Plant Systems program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Agricultural Business Systems for Plant Systems

Prerequisite: Completion of Plant Systems Program of Study

This course is offered to students who have completed all content standards in the Plant Systems program of study. This course provides advanced agriculture students with the information and skills necessary for success in agribusiness and in operating entrepreneurial ventures in the agricultural industry. These courses may cover topics such as economic principles, budgeting, risk management, finance, business law, marketing and promotion strategies, insurance, and resource management. Other possible topics include developing a business plan, employee/employer relations, problem-solving and decision making, commodities, and building leadership skills. These courses may also incorporate a survey of the careers within the agricultural industry. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

Agricultural Leadership, Communication, and Policy for Plant Systems

Prerequisite: Completion of Plant Systems Program of Study

This course is offered to students who have completed all content standards in the Plant Systems program of study. This program provides advanced agriculture students with instruction on leadership and communication skills with a focus on opportunities in the agriculture industries. Topics will include communication research, verbal and written communications, journalism, mass media, agriculture policy and human relations. Other topics may include problem solving and decision making and teamwork skills. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

Environmental and Natural Resource Management for Plant Systems

Prerequisite: Completion of Plant Systems Program of Study

This course is offered to students who have completed all content standards in the Plant Systems program of study. This course introduces advanced agriculture students to concepts of environmental natural resource science and management. This will include ecological concepts and scientific principles related to environmental science, soils, composting and recycling, rangeland management, fire ecology, GPS and GIS, fish and wildlife ecology, forestry, renewable and nonrenewable resources, and fish and wildlife management. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

Food Science Technology for Plant Systems

Prerequisite: Completion of Plant Systems Program of Study

This course is offered to students who have completed all content standards in the Plant Systems program of study. This course allows advanced students to expand on skills and knowledge from Plant Systems program of study while exploring the food industry. This course covers the basic anatomy and physiology of plant species, genetics, reproduction, propagation strategies, evaluation and selection of commodities, land stewardship and marketing. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Greenhouse and Landscape Management

Prerequisite: Completion of Plant Systems Program of Study

This course is offered to students who have completed all content standards in the Plant Systems program of study. This course provides advanced agriculture students with a technical understanding and working knowledge of the greenhouse and landscape industries. Topics include safety, plant physiology and identification, growing media, plant nutrition, integrated pest management, propagation, growing greenhouse crops, analyzing the landscape site, designing the landscape, selecting plants for the design, hardscaping, turf installation and management, pruning and business concepts. Students will gain knowledge and skills related to the care and management of gardens, greenhouses, and landscape installations. The use of technology is an integral part of this course. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

Industry-Recognized Credential – Plant Systems

Prerequisite: Completion of Plant Systems Program of Study

This course is offered to students who have completed all content standards in the Plant Systems program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Plant Systems Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Principles of Agriculture, Food, and Natural Resources

Prerequisite: None

This course is an introduction and survey course of the many career areas in agriculture. Topics include scientific investigations in agriculture, basic animal science, basic plant and soil science, ornamental horticulture, natural resource management, business management, leadership, and communication through FFA, and career skills. An essential part of this course will be leadership activities and Supervised Agricultural Experience Programs.

CTE Work Experience – Agriculture, Food, and Natural Resources

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Agriculture and Natural Resources

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Agricultural Welding, Power, and Structure Technology I	AGWPS I	01.0205	1	F	18401G1.0012
Agricultural Welding, Power, and Structure Technology II	AGWPS II	01.0205	1	F	18401G1.0022
Agricultural Welding, Power, and Structure Technology II LAB	AGWPS II L	01.0205	1	F	18401E1.0022
Agricultural Welding, Power, and Structure Technology Advanced Studies	AGWPS AS	01.0205	1	F	18405E1.0011
Industry-Recognized Credential – Agricultural Welding, Power, and Structure Technology	IRC AGWPS	01.0205	1	F	18999E1.0011
Animal Science	ANIMAL SCI	01.0901	1	F	18101G1.0022
Animal Science Advanced Studies	ANIMAL SCI AS	01.0901	1	F	18101E1.0011
Agricultural Business Systems for Animal Systems	AG BUS AN	01.0102	1	F	18201E1.0011
Agricultural Leadership, Communication, and Policy for Animal Systems	AG LCP AN	01.0899	1	N	18203E1.0011
Environmental and Natural Resource Management for Animal Systems	ENR MGMT AN	03.0101	1	N	18504E1.0011
Food Science Technology for Animal Systems	FOOD SCI TECH AN	01.1001	1	N	18305E1.0011
Veterinary Science	VETERINARY SCI	01.8301	1	~~F~~ M	18105E1.0011
Industry-Recognized Credential – Animal Systems	IRC ANIMAL SYS	01.0901	1	F	18999E1.0011
Plant Science	PLANT SCI	01.1101	1	F	18051G1.0022
Plant Science Advanced Studies	PLANT SCI AS	01.1101	1	F	18051E1.0011
Agricultural Business Systems for Plant Systems	AG BUS PL	01.0102	1	F	18201E1.0011
Agricultural Leadership, Communication, and Policy for Plant Systems	AG LCP PL	01.0899	1	N	18203E1.0011
Environmental and Natural Resource Management for Plant Systems	ENR MGMT PL	03.0101	1	N	18504E1.0011
Food Science Technology for Plant Systems	FOOD SCI TECH PL	01.1001	1	N	18305E1.0011
Greenhouse and Landscape Management	GHOUSE LSCAPE MGMT	01.0604	1	F	18053E1.0011
Industry-Recognized Credential – Plant Systems	IRC PLANT SYS	01.1101	1	F	18999E1.0011
Principles of Agriculture, Food, and Natural Resources	AG SCIENCE	01.0000	1	N	18003G1.0012
CTE Work Experience – Agriculture, Food, and Natural Resources	WORK EXPER AFNR	99.0001	1	N	18998G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Please note change in Non-Trad for Veterinary Science.

Available Sunsetting Programs Course Data
Agriculture, Food, and Natural Resources

The following courses are from programs that are being, or have been, sunsetted. Please refer to the applicable catalog for course descriptions and sequencing.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Agricultural Mechanics Technology Advanced Studies	AG MECH TECH AS	01.0205	1	F	18402E1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment for Architecture and Construction

This Career Cluster® is focused on careers in designing, planning, managing, building, and maintaining the built environment.

- Building Trades in Construction Technology
- Design Drafting
- Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR)

Program Descriptions
Architecture and Construction

Building Trades in Construction Technology

The Building Trades in Construction Technology program provides students with the opportunity to develop technical skills in the building trades within the construction industry. Students will develop skills in the areas of construction including safety, proper use of hand and power tools, blueprint reading, framing, floor systems, finish carpentry, exterior finish applications, fundamental design techniques, identifying material properties and hardware, manufacturing processes, and applying basic principles of plumbing and electrical.

Design Drafting

The Design Drafting program provides students with the principles of technical drafting and design concepts. Areas of study include sketching, dimensioning and annotation, construction and engineering documentation, 3D modeling, problem solving, critiquing, and team building.

Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR)

The heating, ventilation, air conditioning, and refrigeration program provides students with the opportunity to develop technical skills that are used in the HVACR industry. Areas include an introduction to HVACR, trade mathematics, thermodynamics, components of the refrigeration cycle, basic electricity, introduction to heating and combustion, piping principles, soldering, and brazing, compressors, refrigerants, and metering devices.

Program Course Sequences
Architecture and Construction

Program Name	Course Sequence	State Skill Standards*
Building Trades in Construction Technology	**Core Course Sequence** Building Trades in Construction Technology I Building Trades in Construction Technology II **Complementary Course(s)** Building Trades in Construction Technology II LAB ** Building Trades in Construction Technology Advanced Studies Construction Technology Furniture and Cabinetmaking CTE Work Experience - Architecture and Construction Industry-Recognized Credential – Building Trades in Construction Technology	Building Trades in Construction Technology Program of Study with Complementary Course Standards
Design Drafting	**Core Course Sequence** Design Drafting I Design Drafting II **Complementary Course(s)** Design Drafting II LAB ** Design Drafting Advanced Studies Architecture Design CTE Work Experience - Architecture and Construction Industry-Recognized Credential – Design Drafting	Design Drafting Program of Study with Complementary Courses
Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR)	**Core Course Sequence** Heating, Ventilation, Air Conditioning, and Refrigeration I Heating, Ventilation, Air Conditioning, and Refrigeration II **Complementary Courses** Heating, Ventilation, Air Conditioning, and Refrigeration II Lab ** Intermediate Heating, Ventilation, Air Conditioning, and Refrigeration Heating, Ventilation, Air Conditioning, and Refrigeration Advanced Studies CTE Work Experience - Architecture and Construction Industry-Recognized Credential – Heating, Ventilation, Air Conditioning, and Refrigeration	Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR) Program of Study with Complementary Course Standards

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Remaining Course Sequences for Sunsetted Programs
Architecture and Construction

Applicable State Skill Standards are available on website until final program of study core course is completed. For course descriptions, please see the2023-24 or 2024-25 Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

Program Name	Remaining Course(s) from Sunsetted Program Sequence	State Skill Standards*
Architectural Design (Sunsetted 2023-24)	**Complementary Course(s)** Architectural Design Advanced Studies (Last year offered 2025-26)	Architectural Design
Drafting and Design (Sunsetted 2023-24)	**Complementary Course(s)** Drafting and Design Advanced Studies (Last year offered 2025-26)	Drafting and Design
Interior Design (Sunsetted 2023-24)	**Complementary Course(s)** Interior Design Advanced Studies (Last year offered 2025-26)	Interior Design

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Course Descriptions
Architecture and Construction

Building Trades in Construction Technology I

Prerequisite: None

This course will introduce students to the construction industry. Through a hands-on approach, each student will develop basic understanding in the areas of construction: safety, blueprint reading, finish carpentry, framing, fundamental design techniques, identifying material properties and hardware, and applying basic principles of plumbing, electrical and manufacturing processes. Practical application of safe work habits and the correct use of tools and equipment will be emphasized throughout this course. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Building Trades in Construction Technology II

Prerequisite: Building Trades in Construction Technology I

This course is a continuation of Building Trades in Construction Technology I. This course provides intermediate students with additional knowledge and skills in the use of power tools fundamental design techniques, manufacturing processes, framing systems and exterior finish applications, The appropriate use of technology and industry-standard equipment is an integral part of this course.

Building Trades in Construction Technology II LAB

Prerequisite: Concurrent enrollment in Building Trades in Construction Technology II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Building Trades in Construction Technology Advanced Studies

Prerequisite: Completion of Building Trades in Construction Technology Program of Study

This course is offered to students who have completed all content standards in Building Trades in Construction Technology program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Construction Technology

Prerequisite: Completion of Building Trades in Construction Technology Program of Study

This course is offered to students who have completed all content standards in the Building Trades in Construction Technology program of study. This course provides students with knowledge and skills in plumbing, stair layout, HVAC, and exterior applications. Through hands-on projects, students develop technical skills that are used throughout the construction industry. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Furniture and Cabinetmaking

Prerequisite: Completion of Building Trades in Construction Technology Program of Study

This course is offered to students who have completed all content standards in the Building Trades in Construction Technology program of study. This course provides students with knowledge and skills in finish carpentry and cabinetmaking for construction applications. Through hands-on projects, students develop technical skills that are used throughout the construction industry including the software and hardware components of computer numerical controlled (CNC) equipment. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Industry-Recognized Credential – Building Trades in Construction Technology

Prerequisite: Completion of Building Trades in Construction Technology Program of Study

This course is offered to students who have completed all content standards the Building Trades in Construction Technology program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Building Trades in Construction Technology Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Design Drafting I

Prerequisite: None

This course introduces the student to the fundamentals of sketching and computer-aided drafting and design (CADD). This course provides students with the knowledge and practice in sketching techniques, including CADD, required to produce and analyze multi-view drawings, pictorial drawings, and dimensioning. Various career opportunities and areas for postsecondary study will be explored.

Design Drafting II

Prerequisite: Design Drafting I

This course is a continuation of Design Drafting I. This course provides CADD students with techniques and processes related to the various drafting and design industries. Areas of study include the development of advanced CADD and sketching skills, plotting, scaling, three dimensional models, problem solving, critiquing, and team building. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Design Drafting II LAB

Prerequisite: Concurrent enrollment in Design Drafting II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Design Drafting Advanced Studies

Prerequisite: Completion of Design Drafting Program of Study

This course is offered to students who have completed all content standards in the Design Drafting program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Architecture Design

Prerequisite: Completion of Design Drafting Program of Study

This course is offered to students who have completed all content standards in the Design Drafting program of study. This course provides students with instruction in advanced techniques and processes. Students will apply the skills learned in Design Drafting I and II to complete architectural design tasks and professional portfolios. Areas of emphasis will include building codes, building materials, green building techniques, and professional presentation skills. Students will complete project-based activities to compare residential and commercial architectural methodologies. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Industry-Recognized Credential – Design Drafting

Prerequisite: Completion of Design Drafting Program of Study

This course is offered to students who have completed all content standards in the Design Drafting program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Design Drafting Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Heating, Ventilation, Air Conditioning, and Refrigeration I

Prerequisite: None

This course will introduce students to Heating, Ventilation, and Air Conditioning (HVAC). Through a hands-on approach, each student will develop basic understanding in the areas of HVAC: safety, blueprint reading, principles that guide installation and service, electrical components, thermodynamics and heat transfer, and an introduction to heating and refrigeration systems. Practical application of safe work habits and the correct use of tools and equipment will be emphasized throughout this course.

Heating, Ventilation, Air Conditioning, and Refrigeration II

Prerequisite: Heating, Ventilation, Air Conditioning, and Refrigeration I

This course is a continuation of Heating, Ventilation, Air Conditioning, and Refrigeration I. This course provides intermediate HVAC students with knowledge and skills in piping principles, compressors, aspects of refrigerants, and metering devices. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Heating, Ventilation, Air Conditioning, and Refrigeration II LAB

Prerequisite: Concurrent enrollment in Heating, Ventilation, Air Conditioning, and Refrigeration II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Intermediate Heating, Ventilation, Air Conditioning, and Refrigeration

Prerequisite: Completion of Heating, Ventilation, Air Conditioning, and Refrigeration Program of Study

This course is a continuation of Heating, Ventilation, Air Conditioning, and Refrigeration II. This course provides advanced HVAC students with knowledge and skills in air distribution systems, heat pumps, common types of duct work, commercial airside systems, indoor air quality and hydronic systems. Through hands-on projects, students develop technical skills that are used throughout the HVAC industry. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Heating, Ventilation, Air Conditioning, and Refrigeration Advanced Studies

Prerequisite: Completion of Heating, Ventilation, Air Conditioning, and Refrigeration Program of Study

This course is offered to students who have completed all content standards in the Heating, Ventilation, Air Conditioning, and Refrigeration program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Heating, Ventilation, Air Conditioning, and Refrigeration

Prerequisite: Completion of Heating, Ventilation, Air Conditioning, and Refrigeration Program of Study

This course is offered to students who have completed all content standards in the Heating, Ventilation, Air Conditioning, and Refrigeration program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Heating, Ventilation, Air Conditioning, and Refrigeration Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Architecture and Construction

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Architecture and Construction

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Building Trades in Construction Technology I	BUILD CONST TECH I	46.0000	1	F	17003G1.0012
Building Trades in Construction Technology II	BUILD CONST TECH II	46.0000	1	F	17003G1.0022
Building Trades in Construction Technology II LAB	BUILD CONST TECH II L	46.0000	1	F	17003E1.0022
Building Trades in Construction Technology Advanced Studies	BUILD CONST TECH AS	46.0000	1	F	17003E1.0011
Construction Technology	CONST TECH	46.0000	1	F	17002E1.0011
Furniture & Cabinetmaking	FURN CAB	48.0702	1	F	17007E1.0011
Industry-Recognized Credential – Building Trades in Construction Technology	IRC BUILD CONST TECH	46.0000	1	F	17999E1.0011
Design Drafting I	DES DRAFT I	15.1302	1	F	21102G1.0012
Design Drafting II	DES DRAFT II	15.1302	1	F	21102G1.0022
Design Drafting II LAB	DES DRAFT II L	15.1302	1	F	21102E1.0022
Design Drafting Advanced Studies	DES DRAFT AS	15.1302	1	F	21102E1.0011
Architecture Design	ARCH DESG	15.1303	1	F	21103E1.0011
Industry-Recognized Credential – Design Drafting	IRC DES DRAFT	15.1302	1	F	17999E1.0011
Heating, Ventilation, Air Conditioning, and Refrigeration I	HVACR I	47.0201	1	F	17055G1.0012
Heating, Ventilation, Air Conditioning, and Refrigeration II	HVACR II	47.0201	1	F	17055G1.0022
Heating, Ventilation, Air Conditioning, and Refrigeration II LAB	HVACR II L	47.0201	1	F	17055E1.0022
Intermediate Heating, Ventilation, Air Conditioning, and Refrigeration	INT HVACR	47.0201	1	F	17055E1.0011
Heating, Ventilation, Air Conditioning, and Refrigeration Advanced Studies	HVACR AS	47.0201	1	F	17055E1.0011
Industry-Recognized Credential – Heating, Ventilation, Air Conditioning, and Refrigeration	IRC HVACR	47.0201	1	F	17999E1.0011
CTE Work Experience - Architecture and Construction	WORK EXPER CONST	99.0002	1	F	17998G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Available Sunsetting Programs Courses
Architecture and Construction

The following courses are from programs that are being, or have been, sunsetted. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Architectural Design Advanced Studies	ARCH DESG AS	04.0901	1	F	05192E1.0011
Drafting and Design Advanced Studies	CADD AS	15.1302	1	F	21103E1.0011
Interior Design Advanced Studies	INT DESIGN AS	50.0408	1	N	05193E1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment
Arts, A/V Technology, and Communications

This Career Cluster® is focused on designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

- Fashion, Textiles, and Design
- Graphic Design
- Multimedia Communications
- Radio Production
- Theatre Technology
- Video Production

Program Descriptions
Arts, A/V Technology, and Communications

Fashion, Textiles, and Design

The Fashion, Textiles, and Design program provides students with an introduction to the fundamentals of fashion, design, and construction. Areas of study include individual image, psychological and social aspects of clothing, wardrobe planning, consumer decision-making, pattern and textile selection, construction techniques, handling and care techniques, the use and care of sewing equipment, clothing repair, and fashion-related occupations.

Graphic Design

The Graphic Design program provides students with an introduction to the principles of creating graphic works. Areas of study include elements and principles of design, production aspects, legal and ethical issues, and portfolio development.

Multimedia Communications

This program introduces students to various media technologies used in business of digital communications. Areas of study include elements and principles of design, media platforms, legal and ethical issues in project development, production tools and techniques, marketing concepts and social media, professional communications, and content creation. Practices incorporate an appreciation of alternative and culturally diverse perspectives essential in business communication.

Radio Production

The Radio Production program provides students with the concepts and skills needed for radio broadcast production. Students learn on-air production techniques, news writing, sound gathering, and production operations through the platform of an internet radio station. Marketing and station promotion are also learned.

Theatre Technology

The Theatre Technology program instructs students in the craft and technical skills of theatrical production. Instruction includes theatre safety, lighting, scenic design and construction, and stage management.

Video Production

The Video Production program provides students instruction in the various video production processes and techniques. Areas of study include camera operation, on-air program production, creative works, and video editing. Students will produce original videos and live broadcast productions. Emphasis is placed on writing, pre-/post-production, editing techniques, and studio and engineering procedures.

Program Course Sequences
Arts, A/V Technology, and Communications

Program Name	Course Sequence	State Skill Standards*
Fashion, Textiles, and Design	**Core Course Sequence** Fashion, Textiles, and Design I Fashion, Textiles, and Design II **Complementary Course(s)** Fashion, Textiles, and Design II Lab ** Fashion, Textiles, and Design Advanced Studies Fashion Merchandising CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential – Fashion, Textiles, and Design	Fashion, Textiles, and Design
Graphic Design	**Core Course Sequence** Graphic Design I Graphic Design II **Complementary Course(s)** Graphic Design II LAB ** Graphic Design Advanced Studies 2D Animation for Graphic Design CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential – Graphic Design	Graphic Design
Multimedia Communications	**Core Course Sequence** Multimedia Communications I Multimedia Communications II **Complementary Course(s)** Multimedia Communications II LAB ** Multimedia Communications Advanced Studies 2D Animation for Multimedia Communications CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential- Multimedia Communications	Multimedia Communications
Radio Production	**Core Course Sequence** Radio Production I Radio Production II **Complementary Course(s)** Radio Production II LAB ** Radio Production Advanced Studies Podcasting for Radio Production CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential – Radio Production	Radio Production
Theatre Technology	**Core Course Sequence** Theatre Technology I Theatre Technology II **Complementary Course(s)** Theatre Technology Advanced Studies Set Design CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential –Theatre Technology	Theatre Technology

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Program Descriptions
Arts, A/V Technology, and Communications (continued)

Program Name	Course Sequence	State Skill Standards*
Video Production	**Core Course Sequence** Video Production I Video Production II **Complementary Course(s)** Video Production II LAB ** Video Production Advanced Studies Filmmaking Podcasting for Video Production CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential – Video Production	Video Production

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.
** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Remaining Course Sequences for Sunsetted Programs
Arts, A/V Technology, and Communications

Applicable State Skill Standards are available on website until final program of study core course is completed. For course descriptions, please see the2023-24 or 2024-25 Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

Program Name	Remaining Course(s) from Sunsetted Program Sequence	State Skill Standards*
Photography (Sunsetted 2023-24)	**Complementary Course(s)** Photography Advanced Studies (Last year offered 2024-25)	Photography

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.
** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Course Descriptions
Arts, A/V Technology, and Communications

Fashion, Textiles, and Design I

Prerequisite: None

This course is designed to provide students with an understanding of the psychological and social aspects of clothing, and fundamental concepts of fashion, fashion design, and construction. Areas of emphasis include fashion, textiles, clothing construction, merchandising, the use and care of sewing equipment, and exploration of careers in the fashion industry.

Fashion, Textiles, and Design II

Prerequisite: Fashion, Textiles, and Design I

This course is a continuation of Fashion, Textiles, and Design I. This course allows advanced fashion students to further their knowledge and skills. This course will cover advanced construction techniques including illustration, basic graphic design, use of specialty fabrics, creative applications, altering and repairing, and the presentation of finished products in various modalities. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Fashion, Textiles, and Design II LAB

Prerequisite: Concurrent enrollment in Fashion, Textiles and Design II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Fashion, Textiles, and Design Advanced Studies

Prerequisite: Completion of Fashion, Textiles, and Design Program of Study

This course is offered to students who have completed all content standards in the Fashion, Textiles, and Design program of study and desire to pursue advanced study through investigation and in-depth research. Areas of study include marketing strategies and methods of promoting textiles and apparel products, skills and knowledge required in the retail industry, an understanding of sourcing and the merchandising process, research methods including forecasting techniques, and general operational procedures required for business profitability and career success.

Fashion Merchandising

Prerequisite: Completion of Fashion, Textiles, and Design Program of Study

This course is offered to students who have completed all contend standards in the Fashion, Textiles, and Design program of study. The Fashion Merchandising course provides students with an introduction to the fundamentals of merchandising of fashion, textile, and apparel products. Areas of study include forecasting trends, buying, promoting, operating a retail environment, customer service, and the use of technology.

Industry-Recognized Credential – Fashion, Textiles, and Design

Prerequisite: Completion of Fashion, Textiles, and Design Program of Study

This course is offered to students who have completed all content standards in the Fashion, Textiles, and Design program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Fashion, Textiles, and Design Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Graphic Design I

Prerequisite: None

This course is designed to introduce students to the fundamental skills and knowledge needed to create graphic works using industry-standard hardware and software for a variety of purposes and outputs. Areas of study include the understanding of the industry history, terminology, color, design principles, typography, and ethical and legal issues related to graphic designs. Emphasis is placed on layout design and the creation and manipulation of graphics.

Graphic Design II

Prerequisite: Graphic Design I

This course is a continuation of Graphic Design I. This course provides advanced graphic design students with instruction in advanced techniques and processes. Students will work on projects simulating challenges found in the design industry such as corporate identity, publishing, advertising, web applications, and package design. Portfolio development will be emphasized. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Graphic Design II LAB

Prerequisite: Concurrent enrollment in Graphic Design II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Graphic Design Advanced Studies

Prerequisite: Completion of Graphic Design Program of Study

This course is offered to students who have completed all content standards in the Graphic Design program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

2D Animation for Graphic Design

Prerequisite: Completion of Graphic Design Program of Study

This course is offered to students who have completed all contend standards in the Graphic Design program of study. This course expands on the students' knowledge of graphic design with an introduction to 2D animation from preproduction, through production, and postproduction. The design process will be applied to create 2D animation.

Industry-Recognized Credential – Graphic Design

Prerequisite: Completion of Graphic Design Program of Study

This course is offered to students who have completed all content standards in the Graphic Design program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Graphic Design Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Multimedia Communications I

Prerequisite: None

This course introduces students to various media technologies used in business for digital communications. Areas of study will include website development, user interface, video, photo, written content, social media marketing, and front-end design. Practices incorporate an appreciation of alternative and culturally diverse perspectives essential in business communication. The appropriate use of technology and industry-standard tools and techniques is an integral part of this course.

Multimedia Communications II

Prerequisite: Multimedia Communications I

This course is a continuation of Multimedia Communications I and introduces students to various advanced content and media creation techniques used in business for digital communications. Areas of study will include website development, user interface, video, photo, written content, social media marketing, and front-end design. Practices incorporate an appreciation of alternative and culturally diverse perspectives essential in business communication. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Multimedia Communications II LAB

Prerequisite: Concurrent enrollment in Multimedia Communications II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Multimedia Communications Advanced Studies

Prerequisite: Completion of Multimedia Communications Program of Study

This course is offered to students who have completed all content standards in the Multimedia Communications program of study and desire to pursue advanced study through portfolio development and in-depth skill application. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

2D Animation for Multimedia Communication

Prerequisite: Completion of Multimedia Communications Program of Study

This course is offered to students who have completed all contend standards in the Multimedia Communications program of study. This course expands on the students' knowledge of graphic design with an introduction to 2D animation from preproduction, through production, and postproduction. The design process will be applied to create 2D animation.

Industry-Recognized Credential – Multimedia Communications

Prerequisite: Completion of Multimedia Communications Program of Study

This course is offered to students who have completed all content standards in the Multimedia Communications program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Multimedia Communications Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Radio Production I

Prerequisite: None

This course is designed to introduce students to the basic elements and skills needed for radio broadcast production. Students will learn the basics of broadcast news writing, how to gather and incorporate sound, and basic laws and ethical issues of the industry. Equipment instruction includes operating radio amplifiers, mixers, audio boards, microphones, music CDs, and MP3s. Internet and on-air program production are emphasized. Students will become familiar with radio production techniques used within the broadcast industry.

Radio Production II

Prerequisite: Radio Production I

This course is a continuation of Radio Production I. This course provides advanced radio production students with instruction in advanced techniques and processes in radio broadcast and production. Emphasis is placed on the practical application of skills to produce live and prerecorded broadcasts. Pre/post-production, editing techniques, studio and engineering procedures, and production skills will be utilized and honed. Station marketing, branding, and advertising are also explored. The appropriate use of technology and industry standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Radio Production II LAB

Prerequisite: Concurrent enrollment in Radio Production II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Radio Production Advanced Studies

Prerequisite: Completion of Radio Production Program of Study

This course is offered to students who have completed all content standards in the Radio Production program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Podcasting for Radio Production

Prerequisite: Completion of Radio Production Program of Study

This course is offered to students who have completed all contend standards in the Radio Production program of study. This course is an in-depth study on podcasting. This course provides advanced video production and advanced radio production students with instruction in podcast techniques and processes. Emphasis is placed on the advanced principles in podcast which include choosing the correct equipment, completing pre-production, practicing promotion, taking part in production, and submitting their post-production product. Upon successful completion of this course, students will have acquired entry-level skills for creating and posting their own podcasts.

Industry-Recognized Credential – Radio Production

Prerequisite: Completion of Radio Production Program of Study

This course is offered to students who have completed all content standards in the Radio Production program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Radio Production Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Theatre Technology I

Prerequisite: None

This course will introduce the student to the craft and technical skills of theatrical production. Students will be instructed in an overview of the theatre, design process, theatre safety, set construction, stage lighting, sound, and various roles in theatre. The appropriate use of technology and industry-standard tools and techniques is an integral part of this course.

Theatre Technology II

Prerequisite: Theatre Technology I

This course is a continuation of Theatre Technology I. This course provides intermediate theatre technology students with instruction in advanced techniques and processes. Areas of study include lighting, sound, and set construction, as well as stage management. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Theatre Technology Advanced Studies

Prerequisite: Completion of Theatre Technology Program of Study

This course is offered to students who have completed all content standards in the Theatre Technology program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Set Design

Prerequisite: Completion of Theatre Technology Program of Study

This course is offered to students who have completed all contend standards in the Theater Technology program of study. This course provides students with in-depth knowledge in the Set Design process. Areas of study include investigating theatre options, demonstrate theatre safety, demonstrate set construction, understand lighting design, demonstrate audio engineering, practice stage management, apply scenic designs, understand costuming, understand house management and related business functions of the theatre, and research careers in theatre.

Industry-Recognized Credential – Theatre Technology

Prerequisite: Completion of Theatre Technology Program of Study

This course is offered to students who have completed all content standards in the Theare Technology program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Theatre Technology Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Video Production I

Prerequisite: None

This course is designed to introduce students to the basic elements and skills needed to produce a video. Operating video cameras, script writing, editing equipment, microphones, and the process of on-air program production are emphasized. Students will become familiar with video production techniques for a variety of purposes, including broadcast journalism.

Video Production II

Prerequisite: Video Production I

This course is a continuation of Video Production I. This course provides advanced video production students with instruction in advanced techniques and processes. Emphasis is placed on the advanced principles in pre/postproduction, editing techniques, studio and engineering procedures, and live broadcast skills. Students will become familiar with video production techniques for a variety of purposes, including broadcast journalism. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment in this field.

Video Production II LAB

Prerequisite: Concurrent enrollment in Video Production II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Video Production Advanced Studies

Prerequisite: Completion of Video Production Program of Study

This course is offered to students who have completed all content standards in the Video Production program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Filmmaking

Prerequisite: Completion of Video Production Program of Study

This course is offered to students who have completed all contend standards in the Video Production program of study. This course is an in-depth study on filmmaking. This course provides advanced video production students with instruction in filmmaking techniques and processes. Emphasis is placed on the advanced principles in filmmaking which include script writing, taking part in the production of a short film, and completing the postproduction of their short film. Upon successful completion of this course, students will have acquired entry-level skills for creating and posting their own short films.

Podcasting for Video Production

Prerequisite: Completion of Video Production Program of Study

This course is offered to students who have completed all contend standards in the Video Production program of study. This course is an in-depth study on podcasting. This course provides advanced video production and advanced radio production students with instruction in podcast techniques and processes. Emphasis is placed on the advanced principles in podcast which include choosing the correct equipment, completing pre-production, practicing promotion, taking part in production, and submitting their post-production product. Upon successful completion of this course, students will have acquired entry-level skills for creating and posting their own podcasts.

Industry-Recognized Credential – Video Production

Prerequisite: Completion of Video Production Program of Study

This course is offered to students who have completed all content standards in the Video Production program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Video Production Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Arts A/V Technology and Communication

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Arts, A/V Technology and Communications

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Fashion Textiles and Design I	FASHION I	50.0407	1	N	05190G1.0012
Fashion Textiles and Design II	FASHION II	50.0407	1	N	05190G1.0022
Fashion Textiles and Design II LAB	FASHION II L	50.0407	1	N	05190E1.0022
Fashion Textiles and Design Advanced Studies	FASHION AS	50.0407	1	N	05190E1.0011
Fashion Merchandising	FMERCH	52.1902	1	N	12153E1.0011
Industry-Recognized Credential – Fashion, Textiles, and Design	IRC FASHION	50.0407	1	N	10249E1.0011
Graphic Design I	GRAPHIC DESG I	50.0409	1	N	11153G1.0012
Graphic Design II	GRAPHIC DESG II	50.0409	1	N	11153G1.0022
Graphic Design II LAB	GRAPHIC DESG II L	50.0409	1	N	11153E1.0022
Graphic Design Advanced Studies	GRAPHIC DESG AS	50.0409	1	N	11153E1.0011
2D Animation for Graphic Design	2D ANIMATE GD	10.0304	1	N	10204E1.0011
Industry-Recognized Credential – Graphic Design	IRC GRAPHIC DESG	50.0409	1	N	10249E1.0011
Multimedia Communications I	MULTIMEDIA COM I	09.0702	1	N	10203G1.0012
Multimedia Communications II	MULTIMEDIA COM II	09.0702	1	N	10203G1.0022
Multimedia Communications II LAB	MULTIMEDIA COM II L	09.0702	1	N	10203E1.0022
Multimedia Communications Advanced Studies	MULTIMEDIA COM AS	09.0702	1	N	10203E1.0011
2D Animation for Multimedia Communications	2D ANIMATE MMC	10.0304	1	N	10204E1.0011
Industry-Recognized Credential – Multimedia Communications	IRC MULTIMEDIA COM	09.0702	1	N	10249E1.0011
Radio Production I	RADIO PROD I	10.0202	1	F	11107G1.0012
Radio Production II	RADIO PROD II	10.0202	1	F	11107G1.0022
Radio Production II LAB	RADIO PROD II L	10.0202	1	F	11107E1.0022
Radio Production Advanced Studies	RADIO PROD AS	10.0202	1	F	11107E1.0011
Podcasting for Radio Production	PODCAST RP	09.0702	1	N	11105E1.0011
Industry-Recognized Credential – Radio Production	IRC RADIO PROD	10.0202	1	F	10249E1.0011
Theatre Technology I	THEATRE TECH I	50.0502	1	N	05056G1.0012
Theatre Technology II	THEATRE TECH II	50.0502	1	N	05056G1.0022
Theatre Technology Advanced Studies	THEATRE TECH AS	50.0502	1	N	05056E1.0011
Set Design	SET DESIGN	50.0502	1	N	05056E1.0011
Industry-Recognized Credential – Theatre Technology	IRC THEATRE TECH	50.0502	1	N	10249E1.0011
Video Production I	VIDEO PROD I	50.0602	1	F	11051G1.0012
Video Production II	VIDEO PROD II	50.0602	1	F	11051G1.0022
Video Production II LAB	VIDEO PROD II L	50.0602	1	F	11051E1.0022
Video Production Advanced Studies	VIDEO PROD AS	50.0602	1	F	11051E1.0011
Filmmaking	FILM	50.0602	1	F	11056E1.0011
Podcasting for Video Production	PODCAST VP	09.0702	1	N	11105E1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Course Data Information
Arts, A/V Technology and Communications (continued)

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Industry-Recognized Credential – Video Production	**IRC VIDEO PROD**	**50.0602**	**1**	**F**	**10249E1.0011**
CTE Work Experience - Arts A/V Technology and Communication	**WORK EXPER TECH**	**99.0003**	**1**	**N**	**10248G1.0011**

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Available Sunsetting Programs Courses
Arts, A/V Technology, and Communications

The following courses are from programs that are being, or have been, sunsetted. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Photography Advanced Studies	**PHOTO AS**	**50.0406**	**1**	**N**	**05167E1.0011**

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment for Business Management and Administration

This Career Cluster® is focused on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.

- Business Management
- Logistic Management
- Office Management

Program Descriptions
Business Management and Administration

Business Management

The Business Management program provides students with the overall principles of business management. Areas of study include economics, budgeting, human resource management, operations, strategic management, and financial-based decision making.

Logistics Management

Careers in the Logistics Management pathway involve the planning, management, and control of the physical distribution of materials, products, and people. Often, more than one mode of transportation is used as distribution efforts can be complex, even national, or global. These people are responsible for the plans which will ensure that cargo arrives at the right location, on time, and in the safest, most economical manner.

Office Management

Office Management focuses on careers that plan, organize, direct, and evaluate all or part of a business organization through the allocation and use of financial, human, and material resources.

Program Course Sequences
Business Management and Administration

Program Name	Course Sequence	State Skill Standards*
Business Management	**Core Course Sequence** Principles of Business and Marketing Business Management I **Complementary Course(s)** Business Management Advanced Studies Business Entrepreneurship CTE Work Experience – Business Management and Administration Industry-Recognized Credential – Business Management	Business Management
Logistics Management	**Core Course Sequence** Principles of Office and Logistics Management Logistics Management **Complementary Course(s)** Logistics Management Advanced Studies CTE Work Experience – Business Management and Administration Industry-Recognized Credential – Logistics Management	Logistics Management
Office Management	**Core Course Sequence** Principles of Office and Logistics Management Office Management **Complementary Course(s)** Office Management Advanced Studies CTE Work Experience – Business Management and Administration Industry-Recognized Credential – Office Management	Office Management

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

Course Descriptions
Business Management and Administration

Business Management I

Prerequisite: Principles of Business and Marketing

This course is a continuation of the Business Management program. The course addresses several types of management, including customer relationship management, human resources management, information management, knowledge management, project management, quality management, risk management, and strategic management. Economics, finance, operations, and professional development are also emphasized throughout the course. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Business Management Advanced Studies

Prerequisite: Completion of Business Management Program of Study

This course is offered to students who have completed all content standards in a program and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Business Entrepreneurship

Prerequisite: Completion of Business Management Program of Study

This course is offered to students who have completed all content standards in the Business Management program of study. The Entrepreneurship course is designed to introduce students to the nature and scope of entrepreneurship, the impact on market economies, marketing functions and economic concepts related to entrepreneurship. Business plan development is the key tool by which students will learn concepts. Personal traits and behaviors of successful entrepreneurs will also be examined.

Industry-Recognized Credential – Business Management

Prerequisite: Completion of Business Management Program of Study

This course is offered to students who have completed all content standards in the Business Management program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Business Management Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Principles of Business and Marketing

Prerequisite: None

This course is an entry-level course in the Business Management and Marketing programs that develops student understanding and skill in areas such as business law, communications, customer relations, economics, information management, marketing, and operations. Students acquire knowledge of fundamental business and marketing activities, factors affecting business, develop verbal and written communications skills, and participate in career exploration and planning.

Logistics Management

Prerequisite: Principles of Office and Logistics Management

This course is a continuation of the Logistics Management program and prepares students for work in an office or business environment. Students will learn occupational skills related to logistics management such as recording business transactions, posting journal and ledger entries, and preparing financial statements. Additionally, an introduction to supply chain components and organizational structures will be covered. The appropriate use of technology and industry-standard equipment is an integral part of this course. Students will learn and apply advanced skills in logistics management technology and software commonly used in today's work environment. Upon successful completion of this program, students will have acquired entry-level skills for employment in this field.

Logistics Management Advanced Studies

Prerequisite: Completion of Logistics Management Program of Study

This course is offered to students who have completed all content standards in the Logistics Management program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Logistics Management

Prerequisite: Completion of Logistics Management Program of Study

This course is offered to students who have completed all content standards in the Logistics Management program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Logistics Management Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Office Management

Prerequisite: Principles of Office and Logistics Management

This course is a continuation of the Office Management program and prepares students for work in an office or business environment. Students will learn occupational skills in accounting such as recording business transactions, posting journal and ledger entries, and preparing financial statements. Students will be introduced to standard accounting software and expand their knowledge of standard office software. Additionally, an introduction to laws related to business practices, organizational structures and interpersonal office skills will be covered. The appropriate use of technology and industry-standard equipment is an integral part of this course. Students will learn and apply advanced skills in office technology and software commonly used in today's work environment. Upon successful completion of this program, students will have acquired entry-level skills for employment in this field.

Office Management Advanced Studies

Prerequisite: Completion of Office Management Program of Study

This course is offered to students who have completed all content standards in the Office Management program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Office Management

Prerequisite: Completion of Office Management Program of Study

This course is offered to students who have completed all content standards in the Office Management program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Office Management Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Principles of Office and Logistics Management

Prerequisite None

This course is for entry-level students in Office and Logistics Management and prepares students for jobs in an office or business setting with an emphasis in either office management or logistics management. Students will gain knowledge and proficiency of advanced web functions, word-processing applications, spreadsheet applications, presentation applications, and database applications as they are used in a business environment. Students will understand and abide by policies for technology.

CTE Work Experience – Business Management and Administration

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Business Management and Administration

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Business Management I	BUS MGMT I	52.0201	1	F	12052G1.0022
Business Management Advanced Studies	BUS MGMT AS	52.0201	1	F	12052E1.0011
Business Entrepreneurship	BUS ENTREPRENEUR	52.0701	1	~~F~~ N	12053E1.0011
Industry -Recognized Credential – Business Management	IRC BUS MGMT	52.0201	1	F	12999E1.0011
Principles of Business and Marketing	PRIN BUS MKTG	52.0101	1	F	12051G1.0012
Logistics Management	LOGISTICS MGMT	52.0203	1	F	12007G1.0022
Logistics Management Advanced Studies	LOGISTICS MGMT AS	52.0203	1	F	12007E1.0011
Industry -Recognized Credential – Logistics Management	IRC LOGISTICS MGMT	52.0203	1	F	12999E1.0011
Office Management	OFFICE MGMT	52.0204	1	N	12003G1.0022
Office Management Advanced Studies	OFFICE MGMT AS	52.0204	1	N	12003E1.0011
Industry -Recognized Credential – Office Management	IRC OFFICE MGMT	52.0204	1	N	12999E1.0011
Principles of Office and Logistics Management	PRNOLM	52.0204	1	N	12003G1.0012
CTE Work Experience - Business Management and Administration	WORK EXPER BUS ADM	99.0004	1	F	12998G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Please note change in Non-Trad for Business Entrepreneurship.

Program Alignment for Education and Training

This Career Cluster® is focused on planning, managing, and providing education and training services, and related learning support services.

- Early Childhood Education
- Teaching and Training

Program Descriptions
Education and Training

Early Childhood Education

The Early Childhood Education program addresses child development, childcare, and teaching and learning, to guide the development of young children in an educational setting. Areas of study include planning and implementing developmentally appropriate activities, basic health and safety practices, legal requirements for teaching young children, and the development of a career portfolio.

Teaching and Training

The Teaching and Training program provides students with an introduction to the principles of education. This program addresses human development, care, teaching, and learning, so that students can guide the development of learners in an educational setting. Areas of study include planning and implementing developmentally appropriate activities, basic health and safety practices, and legal requirements for teaching learners.

Program Course Sequences
Education and Training

Program Name	Course Sequence	State Skill Standards*
Early Childhood Education	**Core Course Sequence** Early Childhood Education I Early Childhood Education II **Complementary Course(s)** Early Childhood Education II LAB ** Early Childhood Education Advanced Studies CTE Work Experience – Education and Training Industry Recognized Credential- Early Childhood Education	Early Childhood Education
Teaching and Training	**Core Course Sequence** Teaching and Training I Teaching and Training II **Complementary Course(s)** Teaching and Training Advanced Studies CTE Work Experience – Education and Training Industry Recognized Credential- Teaching and Training	Teaching and Training

***** The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Course Descriptions
Education and Training

Early Childhood Education I

Prerequisite: None

This course provides students with an introduction to the principles of early childhood education. This course addresses child development, care, teaching, and learning, so that students can guide the development of young children in an educational setting. Study typically includes planning and implementing developmentally appropriate activities, basic health and safety practices, and legal requirements for teaching young children. The appropriate use of technology and industry-standard equipment is an integral part of this course. Students will research the requirements of early childhood education careers and begin to develop a career portfolio.

Early Childhood Education II

Prerequisite: Early Childhood Education I

This course is a continuation of Early Childhood Education I. This course prepares early childhood education students to guide the development of young children in an educational setting. Course content includes child development, care, teaching, learning, and education issues. Project-based learning experiences include planning and implementing developmentally appropriate activities, health and safety practices, and legal requirements of teaching young children. Students will research the requirements of early childhood education and develop/expand their career portfolio. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Early Childhood Education II LAB

Prerequisite: Concurrent enrollment in Early Childhood Education II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in this program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Early Childhood Education Advanced Studies

Prerequisite: Completion of Early Childhood Education Program of Study

This course is offered to students who have completed all content standards in the Early Childhood Education program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Early Childhood Education

Prerequisite: Completion of Early Childhood Education Program of Study

This course is offered to students who have completed all content standards in the Early Childhood Education program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Early Childhood Education Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Teaching and Training I

Prerequisite: None

This course provides students with an introduction to the principles of education. This course addresses teaching, and learning. Study includes planning and implementing developmentally appropriate activities, basic health and safety practices, and legal requirements for teaching. The appropriate use of technology and industry-standard equipment is an integral part of this course. Students will research the requirements of education and training careers and begin to develop a career portfolio.

Teaching and Training II

Prerequisite: Teaching and Training I

This course is a continuation of Teaching and Training I. Students will continue to develop skills, advanced techniques, and processes. Project-based learning experiences will include planning and implementing developmentally appropriate activities, health and safety practices, and legal requirements of teaching in a school classroom or workplace environment. The appropriate use of technology and industry-standard equipment is an integral part of this course. Students will expand their career portfolio.

Teaching and Training Advanced Studies

Prerequisite: Completion of Teaching and Training Program of Study

This course is offered to students who have completed all content standards in the Teaching and Training program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Teaching and Training

Prerequisite: Completion of Teaching and Training Program of Study

This course is offered to students who have completed all content standards in the Teaching and Training program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Teaching and Training Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Education and Training

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Education and Training

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Early Childhood Education I	EARLY CHILD I	13.1210	1	M	19153G1.0012
Early Childhood Education II	EARLY CHILD II	13.1210	1	M	19153G1.0022
Early Childhood Education II LAB	EARLY CHILD II L	13.1210	1	M	19153E1.0022
Early Childhood Education Advanced Studies	EARLY CHILD AS	13.1210	1	M	19153E1.0011
Industry-Recognized Credential - Early Childhood Education	IRC EARLY CHILD	13.1210	1	M	19199E1.0011
Teaching and Training I	TEACH TRNG I	13.1206	1	M	19151G1.0012
Teaching and Training II	TEACH TRNG II	13.1206	1	M	19151G1.0022
Teaching and Training Advanced Studies	TEACH TRNG AS	13.1206	1	M	19151E1.0011
Industry-Recognized Credential - Teaching and Training	IRC TEACH TRNG	13.1206	1	M	19199E1.0011
CTE Work Experience - Education and Training	WORK EXPER EDUC	99.0005	1	M	19198G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment for Finance

This Career Cluster® is focused on planning, services for financial and investment planning, banking, insurance, and business financial management.

- Accounting and Finance

Program Descriptions
Finance

Accounting and Finance

The Accounting and Finance program provides students with a foundation in accounting, financial information, and financial business decision making. Areas of study include laws and regulations, evaluating financial information, banking, investment, economics, and risk management concepts.

Program Course Sequences
Finance

Program Name	Course Sequence	State Skill Standards*
Accounting and Finance	**Core Course Sequence** Accounting and Finance I Accounting and Finance II **Complementary Course(s)** Accounting and Finance Advanced Studies CTE Work Experience – Finance Industry-Recognized Credential – Accounting and Finance	Accounting and Finance

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

Course Descriptions
Finance

Accounting and Finance I

Prerequisite: None

Students will learn introductory accounting processes and occupational skills in accounting such as recording business transactions, preparing financial statements, maintaining cash controls, and calculating financial ratios. Students will be introduced to and apply generally accepted accounting principles. Topics will also include regulations related to the banking and finance industries, and how managers use financial information generated by accounting departments to influence decision-making. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Accounting and Finance II

Prerequisite: Accounting and Finance I

This course is a continuation of Accounting and Finance I. Students will learn advanced occupational skills in accounting and how they relate to reports used by managers and directors. Students will learn the importance of accounting data in making decisions through an analysis of financial reports such as profit and loss statements, cash flow statements and pro forma statements. Ethics and regulations will be discussed throughout this course. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Accounting and Finance Advanced Studies

Prerequisite: Completion of Accounting and Finance Program of Study

This course is offered to students who have completed all content standards in the Accounting and Finance program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Accounting and Finance

Prerequisite: Completion of Accounting and Finance Program of Study

This course is offered to students who have completed all content standards in the Accounting and Finance program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Accounting and Finance Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Finance

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Finance

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Accounting and Finance I	**ACCT FINANCE I**	**52.0304**	**1**	**N**	**12104G1.0012**
Accounting and Finance II	**ACCT FINANCE II**	**52.0304**	**1**	**N**	**12104G1.0022**
Accounting and Finance Advanced Studies	**ACCT FINANCE AS**	**52.0304**	**1**	**N**	**12104E1.0011**
Industry-Recognized Credential – Accounting and Finance	**IRC ACCT FINANCE**	**52.0304**	**1**	**N**	**12149E1.0011**
CTE Work Experience – Finance	**WORK EXPER FINANCE**	**99.0006**	**1**	**N**	**12148G1.0011**

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment for Government and Public Administration

This Career Cluster® is focused on planning and performing government functions at the local, state, and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.

- Military Science

Program Descriptions
Government and Public Administration

Military Science

The Military Science program provides students with the knowledge and skills in basic first aid, global awareness, problem solving, career exploration, leadership styles, wellness, patriotism, and leadership traits.

Program Course Sequences
Government and Public Administration

Program Name	Course Sequence	State Skill Standards*
Military Science	**Core Course Sequence** Military Science I Military Science II Military Science III **Complementary Course(s)** Military Science Advanced Studies CTE Work Experience – Government and Public Administration	Military Science

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

Course Descriptions
Government and Public Administration

Military Science I

Prerequisite: None

This course introduces students to the fundamentals of Military Science. Areas of emphasis include introduction to JROTC, foundation of leadership, citizenship, wellness, physical fitness, and first aid. Students will also gain experience in specific branch topics related to their program (Air Force/Space Force, Army, Marine Corps, or Navy).

Military Science II

Prerequisite: Military Science I

This course is a continuation of Military Science I. This course provides military science students with the ability to further their skills and knowledge levels. Areas of emphasis include personal growth, basic leadership, military careers, military branch core values, and communications. Students will also gain experience in specific branch topics related to their program (Air Force/Space Force, Army, Marine Corps, Navy). The appropriate use of technology and industry-standard equipment is an integral part of this course.

Military Science III

Prerequisite: Military Science II

This course is the continuation of Military Science II. This course provides an in-depth experience that applies the processes, concepts, and principles as described in the classroom instruction. Areas of emphasis include intermediate leadership and financial planning. Students will also gain experience in specific branch topics related to their program (Air Force/Space Force, Army, Marine Corps, or Navy). The appropriate use of technology and industry-standard equipment is an integral part of this course.

Military Science Advanced Studies

Prerequisite: Completion of Military Science Program of Study

This course is a continuation of Military Science III. This course provides advanced military science students with the ability to further their skills and knowledge levels. Areas of emphasis include advanced leadership, management, and specific branch topics. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

CTE Work Experience – Government and Public Administration

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Government and Public Administration

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Military Science I	**MIL SCI I**	**28.0503**	**1**	**F**	**09002G1.0013**
Military Science II	**MIL SCI II**	**28.0503**	**1**	**F**	**09002G1.0023**
Military Science III	**MIL SCI III**	**28.0503**	**1**	**F**	**09002G1.0033**
Military Science Advanced Studies	**MIL SCI AS**	**28.0503**	**1**	**F**	**09002E1.0011**
CTE Work Experience – Government and Public Administration	**WORK EXPER GOV PUB ADMN**	**28.0503**	**1**	**F**	**09998G1.0011**

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment for Health Science

This Career Cluster® is focused on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

- Biomedical
- Community Health Science
- Dental Science
- Emergency Medical Technician
- Medical Assisting
- Nursing Assistant
- Practical Nursing
- Sports Medicine

Program Descriptions
Health Science

Biomedical

The Biomedical program provides students with the knowledge and skills in inquiry science, disease exploration, human body systems, and biomedical engineering. Areas of study include infectious and genetic diseases, molecular biology, oncology, metabolism, homeostasis, and exercise physiology.

Community Health Science

The Community Health Science program provides students with the knowledge and skills in inquiry science, disease exploration, anatomy and physiology, and public and community health. Areas of study include epidemiology, pathophysiology, health literacy, biostatistics, and environmental risks.

Dental Science

The Dental Science program is designed for the student interested in a career in the dental field. It covers all procedures utilized in the dental office during the practice of dentistry. It gives students a vast knowledge base of dental anatomy, dental disease processes and treatment. It develops the dexterity, knowledge, and communication skills needed to work as a dental assistant.

Emergency Medical Technician

Schools must be approved by the governing State Agency in order to offer this program

The Emergency Medical Technician program provides students with an introduction to emergency medical technician techniques and processes. The program provides the primary skills and knowledge for the pre-hospital emergency medical provider. It includes areas of study in legalities, trauma and medical assessment, documentation, patient care, and basic life support.

Medical Assisting

The Medical Assisting program provides students with the knowledge and skills required for entry level into administrative and clinical medical assisting. Areas of study include diversity, awareness, pharmacology, health information management, and laboratory procedures.

Nursing Assistant

Schools must be approved by the governing State Agency in order to offer this program

The Nursing Assistant program provides students with the knowledge and skills required for entry into the healthcare field. Students completing the didactic and clinical practicum are eligible for the Nevada State Board of Nursing Certifying Exam as a Nursing Assistant.

Practical Nursing

Schools must be approved by the governing State Agency in order to offer this program

The Practical Nursing program provides students with the knowledge and skills required for entry into the healthcare field. The program provides skills in patient care, pharmacology, family nursing, psychosocial behavior, and other designated areas of nursing. Students completing the didactic and clinical practicum are eligible for the Nevada State Board of Nursing transition into a Licensed Practical Nurse.

Sports Medicine

The Sports Medicine program provides students with an introduction to sports medicine techniques and processes. The program provides the primary skills and knowledge in athletic training and sports medicine-related fields. The areas of study include physical fitness, human anatomy and physiology, injury evaluation and prevention, and rehabilitation.

Program Course Sequences
Health Science

Program Name	Course Sequence	State Skill Standards*
Biomedical	**Core Course Sequence** Biomedical I Biomedical II Biomedical III **Complementary Course(s)** Biomedical Advanced Studies CTE Work Experience – Health Science	Biomedical
Community Health Science	**Core Course Sequence** Principles of Health Science Community Health Science **Complementary Course(s)** Community Health Science Advanced Studies Behavioral Health and Wellness for Community Health Science Health Information Management for Community Health Science Pharmacy Practice for Community Health Science CTE Work Experience – Health Science Industry-Recognized Credential – Community Health Science	Principles of Health Science *and* Community Health Science Program of Study with Complementary Course Standards
Dental Science	**Core Course Sequence** Dental Science I Dental Science II **Complementary Course(s)** Dental Science Advanced Studies CTE Work Experience – Health Science Industry-Recognized Credential – Dental Science	Dental Science
Emergency Medical Technician	**Core Course Sequence** Principles of Health Science Emergency Medical Technician **Complementary Course(s)** Emergency Medical Technician LAB ** Emergency Medical Technician Advanced Studies CTE Work Experience – Health Science Industry-Recognized Credential – Emergency Medical Technician	Principles of Health Science *and* Emergency Medical Technician
Medical Assisting	**Core Course Sequence** Principles of Health Science Medical Assisting **Complementary Course(s)** Medical Assisting LAB ** Medical Assisting Advanced Studies Health Information Management for Medical Assisting Pharmacy Practice for Medical Assisting CTE Work Experience – Health Science Industry-Recognized Credential – Medical Assisting	Principles of Health Science *and* Medical Assisting Program of Study with Complementary Course Standards
Nursing Assistant	**Core Course Sequence** Principles of Health Science Nursing Assistant **Complementary Course(s)** Nursing Assistant LAB ** Health Information Management for Nursing Assistant Pharmacy Practice for Nursing Assistant CTE Work Experience – Health Science Industry-Recognized Credential – Nursing Assistant	Principles of Health Science *and* Nursing Assistant Program of Study with Complementary Course Standards

Program Course Sequences
Health Science (continued)

Program Name	Course Sequence	State Skill Standards*
Practical Nursing	**Core Course Sequence** Practical Nursing I Practical Nursing II **Complementary Course(s)** Practical Nursing II LAB ** Practical Nursing Advanced Studies CTE Work Experience – Health Science	Practical Nursing
Sports Medicine	**Core Course Sequence** Principles of Health Science Sports Medicine **Complementary Course(s)** Sports Medicine Advanced Studies CTE Work Experience – Health Science Industry-Recognized Credential – Sports Medicine	Principles of Health Science *and* Sports Medicine

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Remaining Course Sequences for Sunsetted Programs
Health Science

Applicable State Skill Standards are available on website until final program of study core course is completed. For course descriptions, please see the2023-24 or 2024-25 Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

Program Name	Remaining Course(s) from Sunsetted Program Sequence	State Skill Standards*
Health Information Management (Sunsetted 2023-24)	**Complementary Course(s)** Health Information Management Advanced Studies (Last year offered 2025-26)	Health Information Management
Pharmacy Practice (Sunsetted 2023-24)	**Complementary Course(s)** Pharmacy Practice Advanced Studies (Last year offered 2025-26)	Pharmacy Practice
Respiratory Science (Sunsetted 2023-24)	**Complementary Course(s)** Respiratory Science Advanced Studies (Last year offered 2025-26)	Respiratory Science

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

Course Descriptions
Health Science

Biomedical I

Prerequisite: None

This course introduces students to advanced science courses related to medical fields. Areas of exploration will include infectious, genetic, and lifestyle diseases that are dealt with in the biomedical professions. Topics include medical terminology, nutrition, mitosis, and microbiology. Practices incorporate an appreciation of alternative and culturally diverse healthcare contributions by different societies. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Biomedical II

Prerequisite: Biomedical I

This course is a continuation of Biomedical I. This course allows intermediate biomedical students to develop their knowledge and skills learned in Biomedical I. Areas of study will include body systems, metabolism, exercise physiology, immunology, and homeostasis. The students will be introduced to the interactions of the human body and design experiments to investigate the structure and function. Topics include histology, sensory response, physiology, ATP, and wellness. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Biomedical III

Prerequisite: Biomedical II

This course is a continuation of Biomedical II. This course provides advanced biomedical students with instruction in advanced techniques and processes. The students will be introduced to pathogen defense, molecular biology, oncology, and biomedical engineering. Topics include community health, genetics, cancer, and biotechnology. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Biomedical Advanced Studies

Prerequisite: Completion of Biomedical Program of Study

This course is offered to students who have completed all content standards in the Biomedical program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Community Health Science

Prerequisite: Principles of Health Science

This course is designed to provide students with knowledge and skills required for entry into the healthcare field that includes community health worker, biostatistics, epidemiology, public health, substance abuse, person health, cellular and molecular biology, and environmental health. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Community Health Science Advanced Studies

Prerequisite: Completion of Community Health Science Program of Study

This course is offered to students who have completed all content standards in the Community Health Science program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Behavioral Health and Wellness for Community Health Science

Prerequisite: Completion of Human and Social Services Program of Study

This course is offered to students who have completed all content standards in the Human and Social Services program of study. This course introduces the study of behavioral health and wellness. Emphasis is placed on the exploration of the behavioral healthcare systems, ethical and legal responsibilities, importance of self-care, and basic anatomy and mental health disorders.

Health Information Management for Community Health Science

Prerequisite: Completion of Community Health Science Program of Study

This course is offered to students who have completed all content standards in the Community Health Science program of study. The Health Information Management course is designed to familiarize students with computerized account management and to help students develop confidence and skills necessary to become successful users of Medical Account Management software. Areas of study include understanding the legal aspects of HIPPA and responsibilities of medical office staff, utilizing a computer program to maintain patient files.

Pharmacy Practice for Community Health Science

Prerequisite: Completion of Community Health Science Program of Study

This course is offered to students who have completed all content standards in the Community Health Science program of study. The Pharmacy Practice course provides students with an introduction to practices and fundamentals of pharmacology. Areas of study include pharmacy, calculations, routes, inventory management, and factors affecting drug activity.

Industry-Recognized Credential – Community Health Science

Prerequisite: Completion of Community Health Science Program of Study

This course is offered to students who have completed all content standards in the Community Health Science program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Community Health Science Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Dental Science I

Prerequisite: None

This introductory course is designed for the student interested in a career in the dental field. It covers all procedures utilized in the dental office during the practice of dentistry. It gives students a vast knowledge base of dental anatomy, dental disease processes and treatment. It develops the dexterity, knowledge, and communication skills needed to work as a dental assistant. Emphasis is placed on developing critical-thinking skills, research skills, and necessary techniques. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Dental Science II

Prerequisite: Dental Science I

This course is a continuation of Dental Science I. This course allows intermediate dental science students to develop their knowledge and skills learned in Dental Science I. Areas of study will include oral pathology, dental medications, legal and ethical issues, and research skills. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Dental Science Advanced Studies

Prerequisite: Completion of Dental Science Program of Study

This course is offered to students who have completed all content standards in the Dental Science program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Dental Science

Prerequisite: Completion of Dental Science Program of Study

This course is offered to students who have completed all content standards in the Dental Science program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Dental Science Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Emergency Medical Technician

Prerequisite: Principles of Health Science

Schools must be approved by the governing State Agency in order to offer this course

This course is a continuation of Principles of Health Science. This course is designed for the student interested in a career in the pre-hospital emergency medical provider field. Areas of study include legal and ethical issues, patient's airway, medical, and trauma assessment, and medical documentation. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education**.**

Emergency Medical Technician LAB

Prerequisite: Concurrent enrollment in Emergency Medical Technician

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Emergency Medical Technician Advanced Studies

Prerequisite: Completion of Emergency Medical Technician Program of Study

This course is offered to students who have completed all content standards in the Emergency Medical Technician program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Emergency Medical Technician

Prerequisite: Completion of Emergency Medical Technician Program of Study

This course is offered to students who have completed all content standards in the Emergency Medical Technician program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Emergency Medical Technician Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Medical Assisting

Prerequisite: Principles of Health Science

This course provides advanced health science students with the skills required for entry-level positions such as administrative medical assistant or clinical medical assistant. Demonstrations and laboratory experiences are an integral part of this course. Instructional practices incorporate integration of diversity awareness including appreciation of all cultures and their important contributions to our society. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Medical Assisting LAB

Prerequisite: Concurrent enrollment in Medical Assisting

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Medical Assisting Advanced Studies

Prerequisite: Completion of Medical Assisting Program of Study

This course is offered to students who have completed all content standards in the Medical Assisting program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Health Information Management for Medical Assisting

Prerequisite: Completion of Medical Assisting Program of Study

This course is offered to students who have completed all content standards in the Medical Assisting program of study. The Health Information Management course is designed to familiarize students with computerized account management and to help students develop confidence and skills necessary to become successful users of Medical Account Management software. Areas of study include understanding the legal aspects of HIPPA and responsibilities of medical office staff, utilizing a computer program to maintain patient files.

Pharmacy Practice for Medical Assisting

Prerequisite: Completion of Medical Assisting Program of Study

This course is offered to students who have completed all content standards in the Medical Assisting program of study. The Pharmacy Practice course provides students with an introduction to practices and fundamentals of pharmacology. Areas of study include pharmacy, calculations, routes, inventory management, and factors affecting drug activity.

Industry-Recognized Credential – Medical Assisting

Prerequisite: Completion of Medical Assisting Program of Study

This course is offered to students who have completed all content standards in the Medical Assisting program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Medical Assisting Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Nursing Assistant

Prerequisite: Principles of Health Science

Schools must be approved by the governing State Agency in order to offer this course

This course is designed to provide students with the knowledge and skills required for entry into the healthcare field. Students completing this program, including the clinical practicum, are eligible to apply independently for the Nevada State Board of Nursing Certifying Exam for Nursing Assistants. Due to certification requirements, a student must complete the program in its entirety. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Nursing Assistant LAB

Prerequisite: Concurrent enrollment in Nursing Assistant

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Health Information Management for Nursing Assistant

Prerequisite: Completion of Nursing Assistant Program of Study

This course is offered to students who have completed all content standards in the Nursing Assistant program of study. The Health Information Management course is designed to familiarize students with computerized account management and to help students develop confidence and skills necessary to become successful users of Medical Account Management software. Areas of study include understanding the legal aspects of HIPPA and responsibilities of medical office staff, utilizing a computer program to maintain patient files.

Pharmacy Practice for Nursing Assistant

Prerequisite: Completion of Nursing Assistant Program of Study

This course is offered to students who have completed all content standards in the Nursing Assistant program of study. The Pharmacy Practice course provides students with an introduction to practices and fundamentals of pharmacology. Areas of study include pharmacy, calculations, routes, inventory management, and factors affecting drug activity.

Industry-Recognized Credential – Nursing Assistant

Prerequisite: Completion of Nursing Assistant Program of Study

This course is offered to students who have completed all content standards in the Nursing Assistant program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Nursing Assistant Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Practical Nursing I

Prerequisite: None

Schools must be approved by the governing State Agency in order to offer this course

This course introduces the principles and procedures employed in nursing. Students will practice nursing and patient role and responsibilities, implement pharmacological therapies, study anatomy and physiology, and will learn how to provide a safe and effective care environment. Students will compare career fields and related careers to develop a personal perspective and an institutional professional growth plan to develop team building and leadership skills related to nursing.

Practical Nursing II

Prerequisite: Practical Nursing I

Schools must be approved by the governing State Agency in order to offer this course

This course is a continuation of Practical Nursing I. This course provides nursing students with instruction in advanced techniques and critical thinking. This course provides instruction in the practical areas of clinical judgement, psychosocial integrity, physiological development, family nursing, and the transition to a licensed practical nurse. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Practical Nursing II LAB

Prerequisite: Concurrent enrollment in Practical Nursing II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Practical Nursing Advanced Studies

Prerequisite: Completion of Practical Nursing Program of Study

This course is offered to students who have completed all content standards in the Practical Nursing program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Sports Medicine

Prerequisite: Principles of Health Science

This course is designed to introduce students to the field of sports medicine. It will provide students with the opportunity to explore athletic training and sports medicine related fields. Students will receive instruction in sports medicine terminology, anatomy and physiology, kinesiology, injury evaluation and prevention procedures, and careers in sports medicine. Students will demonstrate skills in first aid and sports injury management and rehabilitation. The appropriate use of technology and industry-standard equipment is an integral part of the course.

Sports Medicine Advanced Studies

Prerequisite: Completion of Sports Medicine Program of Study

This course is offered to students who have completed all content standards in a program and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Sports Medicine

Prerequisite: Completion of Sports Medicine Program of Study

This course is offered to students who have completed all content standards in the Sports Medicine program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Sports Medicine Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Principles of Health Science

Prerequisite: None

The course will introduce students to human structure and function. Areas of study include anatomy, healthcare delivery systems, medical terminology, emergency management, health information technology, and legal practices. Students will demonstrate skills in cardiopulmonary resuscitation (CPR) and first aid. The appropriate use of technology and industry-standard equipment is an integral part of this course.

CTE Work Experience – Health Science

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Health Science

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Biomedical I	BIOMED I	26.0102	1	N	14255G1.0013
Biomedical II	BIOMED II	26.0102	1	N	14255G1.0023
Biomedical III	BIOMED III	26.0102	1	N	14255G1.0033
Biomedical Advanced Studies	BIOMED AS	26.0102	1	N	14255E1.0011
Community Health Science	CMTY HEALTH SCI	51.2208	1	N	08053G1.0022
Community Health Science Advanced Studies	CMTY HEALTH SCI AS	51.2208	1	N	08053E1.0011
Behavioral Health and Wellness for Community Health Science	BEHAV HLTH WLNS CHS	51.1599	1	N	19301E1.0011
Health Information Management for Community Health Science	HLTH INFO CHS	51.0707	1	M	14157E1.0011
Pharmacy Practice for Community Health Science	PHARM CHS	51.0805	1	M	14152E1.0011
Industry Recognized Credential- Community Health Science	IRC CMTY HLTH SCI	51.2208	1	N	14999E1.0011
Dental Science I	DENTAL SCI I	51.0601	1	M	14054G1.0012
Dental Science II	DENTAL SCI II	51.0601	1	M	14054G1.0022
Dental Science Advanced Studies	DENTAL SCI AS	51.0601	1	M	14054E1.0011
Industry Recognized Credential- Dental Assisting	IRC DENTAL SCI	51.0601	1	N	14999E1.0011
Emergency Medical Technician	EMER MED TECH	51.0904	1	N	14055G1.0022
Emergency Medical Technician LAB	EMER MED TECH L	51.0904	1	N	14055E1.0022
Emergency Medical Technician Advanced Studies	EMER MED TECH AS	51.0904	1	N	14055E1.0011
Industry Recognized Credential- Emergency Medical Technician	IRC EMER MED TECH	51.0904	1	N	14999E1.0011
Medical Assisting	MEDICAL ASST	51.0801	1	M	14151G1.0022
Medical Assisting LAB	MEDICAL ASST L	51.0801	1	M	14151E1.0022
Medical Assisting Advanced Studies	MEDICAL ASST AS	51.0801	1	M	14151E1.0011
Health Information Management for Medical Assisting	HLTH INFO MED ASST	51.0707	1	M	14157E1.0011
Pharmacy Practice for Medical Assisting	PHARM MED ASST	51.0805	1	M	14152E1.0011
Industry-Recognized Credential – Medical Assisting	IRC MEDICAL ASST	51.0801	1	M	14999E1.0011
Nursing Assistant	NURSING ASST	51.3902	1	M	14051G1.0022
Nursing Assistant LAB	NURSING ASST L	51.3902	1	M	14051E1.0022
Health Information Management for Nursing Assistant	HLTH INFO NURSE	51.0707	1	M	14157E1.0011
Pharmacy Practice for Nursing Assistant	PHARM NURSE ASST	51.0805	1	M	14152E1.0011
Industry-Recognized Credential – Nursing Assistant	IRC NURSING ASST	51.3902	1	M	14999E1.0011
Practical Nursing I	PRAC NURS I	51.3901	1	M	14052G1.0012
Practical Nursing II	PRAC NURS II	51.3901	1	M	14052G1.0022
Practical Nursing II LAB	PRAC NURS II L	51.3901	1	M	14052E1.0022
Practical Nursing Advanced Studies	PRAC NURS AS	51.3901	1	M	14052E1.0011
Sports Medicine	SPORTS MED	51.0913	1	N	14062G1.0022
Sports Medicine Advanced Studies	SPORTS MED AS	51.0913	1	N	14062E1.0011
Industry Recognized Credential- Sports Medicine	IRC SPORTS MED	51.0913	1	N	14999E1.0011
Principles of Health Science	PRN HEALTH SCI	51.0000	1	N	14002G1.0012
CTE Work Experience - Health Science	WORK EXPER HEALTH	99.0008	1	N	14298G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Available Sunsetting Programs Courses
Health Science

The following courses are from programs that are being, or have been, sunsetted. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Health Information Management Advanced Studies	HLTH INFO MGMT AS	51.0707	1	M	14157E1.0011
Pharmacy Practice Advanced Studies	PHARMACY PRACT AS	51.0805	1	M	14152E1.0011
Respiratory Science Advanced Studies	RESP SCI AS	51.0908	1	N	14061E1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

This Page was Intentionally Left Blank

Program Alignment for Hospitality and Tourism

This Career Cluster® is focused on management, marketing, and operations of restaurants and other food services, lodging, attractions, recreation events, and travel related services.

- Culinary Arts
- Hospitality and Tourism

Program Descriptions
Hospitality and Tourism

Culinary Arts

The Culinary Arts program provides students with an introduction to the principles and techniques of commercial food production. Areas of study include basic skills in food handling, food and nutritional science, equipment technology, cooking methods, kitchen safety, sanitation procedures, and employability skills in environments that model industry standards.

Hospitality and Tourism

The Hospitality and Tourism program provides students with an introduction to many career areas in the hospitality field. Students will learn the roles of jobs in both the front-of-the-house and back-of-the-house in travel and tourism, hotel operations, food and beverage, and event sales and service.

Program Course Sequences
Hospitality and Tourism

Program Name	Course Sequence	State Skill Standards*
Culinary Arts	**Core Course Sequence** Culinary Arts I Culinary Arts II **Complementary Course(s)** Culinary Arts II LAB ** Culinary Arts Advanced Studies Baking and Pastry Nutrition for Culinary Arts CTE Work Experience – Hospitality and Tourism Industry-Recognized Credential – Culinary Arts	Culinary Arts
Hospitality and Tourism	**Core Course Sequence** Hospitality and Tourism I Hospitality and Tourism II **Complementary Course(s)** Hospitality and Tourism II LAB ** Hospitality and Tourism Advanced Studies CTE Work Experience – Hospitality and Tourism Industry-Recognized Credential –Hospitality and Tourism	Hospitality and Tourism

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Course Descriptions
Hospitality and Tourism

Culinary Arts I

Prerequisite: None

This course provides students with an introduction to the principles and techniques of commercial food production and the exploration of career and technical student organizations. The classroom is patterned after industry with emphasis on food related careers. Students acquire basic skills in food handling, food and nutritional science, equipment technology, cooking methods, kitchen safety, sanitation procedures, and employability skills. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Culinary Arts II

Prerequisite: Culinary Arts I

This course is a continuation of Culinary Arts I. This course prepares culinary students to build on fundamental skills developed in Culinary Arts I. Students will receive practical training in areas of food preparation, equipment use, and service. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Culinary Arts II LAB

Prerequisite: Concurrent enrollment in Culinary Arts II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in this program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Culinary Arts Advanced Studies

Prerequisite: Completion of Culinary Arts Program of Study

This course is offered to students who have completed all content standards in the Culinary Arts program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Baking and Pastry

Prerequisite: Completion of Culinary Arts Program of Study

This course is offered to students who have completed all content standards in the Culinary Arts program of study. The Baking and Pastry complementary course provides a study of the Baking and Pastry arts. Students explore baking terminology, tool and equipment use, formula conversions, functions of ingredients, and methods used in creating breads, pastries, cookies, cakes, and other desserts. The fundamentals of basic decorating skills are also covered. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Nutrition for Culinary Arts

Prerequisite: Completion of Culinary Arts Program of Study

This course is offered to students who have completed all content standards in the Culinary Arts program of study. This course provides an introduction to the study of foods and nutrition. Emphasis is placed on the exploration of foods and meal planning in relation to nutrition science, fitness, the lifecycle, customs, and preparation techniques. Kitchen safety, sanitation, and resources management are integral parts of this course.

Industry-Recognized Credential – Culinary Arts

Prerequisite: Completion of Culinary Arts Program of Study

This course is offered to students who have completed all content standards in the Culinary Arts program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Culinary Arts Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Hospitality and Tourism I

Prerequisite: None

This course provides students with an introduction to the hospitality and tourism industry. Students will acquire a basic understanding of the industry sectors: lodging, food and beverage, recreation, amusement and attractions, and sales, catering, and convention services. Students also study business functions and the importance of guest service. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Hospitality and Tourism II

Prerequisite: Hospitality and Tourism I

This course is a continuation of Hospitality and Tourism I, building on fundamental skills developed in the previous course. Students will receive additional training in all sectors of hospitality, including business functions and guest service. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Hospitality and Tourism II LAB

Prerequisite: Concurrent enrollment in Hospitality and Tourism II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Hospitality and Tourism Advanced Studies

Prerequisite: Completion of Hospitality and Tourism Program of Study

This course is offered to students who have completed all content standards in the Hospitality and Tourism program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Hospitality and Tourism

Prerequisite: Completion of Hospitality and Tourism Program of Study

This course is offered to students who have completed all content standards in the Hospitality and Tourism program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Hospitality and Tourism Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Hospitality and Tourism

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Hospitality and Tourism

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Culinary Arts I	CUL ARTS I	12.0503	1	F	16053G1.0012
Culinary Arts II	CUL ARTS II	12.0503	1	F	16053G1.0022
Culinary Arts II LAB	CUL ARTS II L	12.0503	1	F	16053E1.0022
Culinary Arts Advanced Studies	CUL ARTS AS	12.0503	1	F	16053E1.0011
Baking and Pastry	BAKEP	12.0501	1	F	16056E1.0011
Nutrition for Culinary Arts	NUTRITION CULA	19.0501	1	M	19252E1.0011
Industry-Recognized Credential – Culinary Arts	IRC CUL ARTS	12.0503	1	F	16999E1.0011
Hospitality and Tourism I	HOSPLTY TOUR I	52.0901	1	N	16001G1.0012
Hospitality and Tourism II	HOSPLTY TOUR II	52.0901	1	N	16001G1.0022
Hospitality and Tourism II LAB	HOSPLTY TOUR II L	52.0901	1	N	16001E1.0022
Hospitality and Tourism Advanced Studies	HOSPLTY TOUR AS	52.0901	1	N	16001E1.0011
Industry-Recognized Credential – Hospitality and Tourism	IRC HOSPLTY TOUR	52.0901	1	N	16999E1.0011
CTE Work Experience - Hospitality and Tourism	WORK EXPER HOSP	99.0009	1	N	16198G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment for Human Services

This Career Cluster® is focused on preparing individuals for employment in careers that relate to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services.

- Cosmetology
- Family and Consumer Sciences
- Human and Social Services

Program Descriptions
Human Services

Cosmetology

Schools must be approved by the governing State Agency in order to offer this program

The Cosmetology program is designed to prepare students for the Nevada State Board of Cosmetology Licensing Exam and to meet the 1,800-hour requirement for licensure. Students have an opportunity to earn a master license that allows them to choose many career options such as a nail technician, aesthetician, or hair stylist. Areas of study include theory and clinical instruction in professional ethics, sanitation, human anatomy, facials, skin care, makeup application, manicures, pedicures, acrylic nails, haircutting, hair coloring, permanent waving, chemical relaxing, and all phases of hair care.

Family and Consumer Sciences

The Family and Consumer Sciences program provides instruction in topics which prepare students for adult roles and responsibilities, as well as workplace readiness. This program of study focuses on developing skills for balancing home, work, and life. Students study life, wealth, and home management, family dynamics, nutrition, wellness, and community leadership. This program also offers students a pathway into occupations related to human and social sciences: such as consumer or financial services, home care assistance, food related industries, counseling, social work, and family and consumer sciences professions.

Human and Social Services

The Human and Social Services program provides students with opportunities to learn about occupations in Human Services. Areas of study include Consumer Services, Counseling and Mental Health Services, Early Childhood Development and Services, Family and Community Services and Personal Care Services.

Program Course Sequences
Human Services

Program Name	Course Sequence	State Skill Standards*
Cosmetology	**Core Course Sequence** Principles of Cosmetology Cosmetology I Cosmetology II **Complementary Course(s)** CTE Work Experience – Human Services Industry-Recognized Credential – Cosmetology	Cosmetology
Family and Consumer Sciences	**Core Course Sequence** Family and Consumer Sciences I Family and Consumer Sciences II **Complementary Course(s)** Family and Consumer Sciences II LAB ** Family and Consumer Sciences Advanced Studies Nutrition for FACS CTE Work Experience – Human Services Industry-Recognized Credential – Family and Consumer Sciences	Family and Consumer Sciences
Human and Social Services	**Core Course Sequence** Human and Social Services I Human and Social Services II **Complementary Course(s)** Human and Social Services Advanced Studies Behavioral Health and Wellness for Human and Social Services CTE Work Experience – Human Services Industry-Recognized Credential –Human and Social Services	Human and Social Services

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.
** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Remaining Course Sequences for Sunsetted Programs
Human Services

Applicable State Skill Standards are available on website until final program of study core course is completed. For course descriptions, please see the2023-24 or 2024-25 Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

Program Name	Remaining Course(s) from Sunsetted Program Sequence	State Skill Standards*
Foods and Nutrition (Sunsetted 2023-24)	**Complementary Course(s)** Foods and Nutrition Advanced Studies (Last year offered 2025-26)	Foods and Nutrition
Human Development (Sunsetted 2023-24)	**Complementary Course(s)** Human Development Advanced Studies (Last year offered 2025-26)	Human Development

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

Course Descriptions
Human Services

Cosmetology I

Prerequisite: Principles of Cosmetology

Schools must be approved by the governing State Agency in order to offer this course

The six-credit-block course is designed to prepare students for the Nevada State Board of Cosmetology Licensing Exam and to meet the 1,800-hour requirement for licensure. Students have an opportunity to earn a master license that allows them to choose many career options such as a nail technician, aesthetician, or hair stylist. Areas of study include theory and clinical instruction in professional ethics, sanitation, human anatomy, facials, skin care, makeup application, manicures, pedicures, acrylic nails, haircutting, hair coloring, permanent waving, chemical relaxing, and all phases of hair care. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Cosmetology II

Prerequisite: Cosmetology I

Schools must be approved by the governing State Agency in order to offer this course

The six-credit-block course is designed to prepare students for the Nevada State Board of Cosmetology Licensing Exam and to meet the 1,800-hour requirement for licensure. Students have an opportunity to earn a master license that allows them to choose many career options such as a nail technician, aesthetician, or hair stylist. Areas of study include theory and clinical instruction in professional ethics, sanitation, human anatomy, facials, skin care, makeup application, manicures, pedicures, acrylic nails, haircutting, hair coloring, permanent waving, chemical relaxing, and all phases of hair care. A goal of the program is to provide a real-work environment where students work on the public to practice and master those skills necessary for success in the workplace. Emphasis is also placed on job seeking/keeping skills, such as effective communication, customer service, teamwork, filling out a job application, building a resume, and interviewing techniques. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Industry-Recognized Credential – Cosmetology

Prerequisite: Completion of Cosmetology Program of Study

This course is offered to students who have completed all content standards in the Cosmetology program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Cosmetology Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Principles of Cosmetology

Prerequisite: None

Schools must be approved by the governing State Agency in order to offer this course

This course introduces students to the fundamentals of cosmetology. Areas of study include sanitation procedures, safety requirements, tools, and equipment. The appropriate use of technology is an integral part of this course.

Family and Consumer Sciences I

Prerequisite: None

This course is designed to address a broad range of knowledge and skills related to personal development, promotion of strong interpersonal relationships, clothing selection and maintenance, nutrition and wellness, food selection and preparation, budgeting, and the management of multiple family, community, and wage-earner roles.

Family and Consumer Sciences II

Prerequisite: Family and Consumer Sciences I

This course is a continuation of Family and Consumer Sciences I. It builds on concepts related to food, clothing, consumerism, relationships, and career preparation. This program also offers students a pathway into occupations related to human and social sciences: such as consumer or financial services, home care assistance, food related industries, counseling, social work, and family and consumer sciences professions. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will be prepared for additional education in these fields.

Family and Consumer Sciences II LAB

Prerequisite: Concurrent enrollment in Family and Consumer Sciences II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Family and Consumer Sciences Advanced Studies

Prerequisite: Completion of Family and Consumer Sciences Program of Study

This course is offered to students who have completed all content standards in the Family and Consumer Sciences program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Nutrition for FACS

Prerequisite: Completion of Family and Consumer Sciences Program of Study

This course is offered to students who have completed all content standards in the Family and Consumer Sciences program of study. This course provides an introduction to the study of foods and nutrition. Emphasis is placed on the exploration of foods and meal planning in relation to nutrition science, fitness, the lifecycle, customs, and preparation techniques. Kitchen safety, sanitation, and resources management are integral parts of this course.

Industry-Recognized Credential – Family and Consumer Sciences

Prerequisite: Completion of Family and Consumer Sciences Program of Study

This course is offered to students who have completed all content standards in the Family and a program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Family and Consumer Sciences Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Human and Social Services I

Prerequisite: None

This course provides students with an introduction to Human Services professions. This course addresses the roles and responsibilities, skills, behaviors, and knowledge needed to provide services in a variety of careers. The appropriate use of technology and industry-standard equipment is an integral part of this course. Students will begin to develop a career portfolio.

Human and Social Services II

Prerequisite: Human and Social Services I

This course is a continuation of Human and Social Services I. Students will continue to develop skills and strategies for social services-based careers. Project-based learning experiences will include planning and implementing activities following requirements of a variety of workplace environments. The appropriate use of technology and industry-standard equipment is an integral part of this course. Students will expand their career portfolio.

Human and Social Services Advanced Studies

Prerequisite: Completion of Human and Social Services Program of Study

This course is offered to students who have completed all content standards in the Human and Social Services program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Behavioral Health and Wellness for Human and Social Services

Prerequisite: Completion of Human and Social Services Program of Study

This course is offered to students who have completed all content standards in the Human and Social Services program of study. This course introduces the study of behavioral health and wellness. Emphasis is placed on the exploration of the behavioral healthcare systems, ethical and legal responsibilities, importance of self-care, and basic anatomy and mental health disorders.

Industry-Recognized Credential – Human and Social Services

Prerequisite: Completion of Human and Social Services Program of Study

This course is offered to students who have completed all content standards in the Human and Social Services program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Human and Social Services Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Human Services

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Human Services

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Cosmetology I	COSMO I	12.0401	6	M	19101G6.0023
Cosmetology II	COSMO II	12.0401	6	M	19101G6.0033
Industry-Recognized Credential – Cosmetology	IRC COMSO	12.0401	1	M	19999E1.0011
Principles of Cosmetology	PRIN COSMO	12.0401	1	M	19101G1.0011
Family and Consumer Sciences I	FAMILY CS I	19.0101	1	N	19251G1.0012
Family and Consumer Sciences II	FAMILY CS II	19.0101	1	N	19251G1.0022
Family and Consumer Sciences II LAB	FAMILY CS II L	19.0101	1	N	19251E1.0022
Family and Consumer Sciences Advanced Studies	FAMILY CS AS	19.0101	1	N	19251E1.0011
Nutrition for FACS	NUTRITION FACS	19.0501	1	M	19252E1.0011
Industry-Recognized Credential – Family and Consumer Sciences	IRC FAMILY CS	19.0101	1	N	19999E1.0011
Human and Social Services I	HSS I	13.1101	1	M	19301G1.0012
Human and Social Services II	HSS II	13.1101	1	M	19301G1.0022
Human and Social Services Advanced Studies	HSS AS	13.1101	1	M	19301E1.0011
Behavioral Health and Wellness for Human and Social Services	BEHAV HLTH WLNS HSS	51.1599	1	N	19301E1.0011
Industry-Recognized Credential – Human and Social Services	IRC HSS	13.1101	1	M	19999E1.0011
CTE Work Experience – Human Services	WORK EXPER HU SERV	99.0010	1	M	19998G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Available Sunsetting Programs Courses
Human Services

The following courses are from programs that are being, or have been, sunsetted. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Foods and Nutrition Advanced Studies	FOODS AS	19.0501	1	M	19252E1.0011
Human Development Advanced Studies	HUMAN DEVLOP AS	19.0701	1	M	19261E1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment for Information Technology

This Career Cluster® is focused on building linkages in information technology occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

- Advanced Computer Science
- Cybersecurity
- Digital Game Development
- Information Technology Networking
- Web Design and Development

Program Descriptions
Information Technology

Advanced Computer Science

The Advanced Computer Science program provides students a deeper exploration in the study of computer science and computational thinking to include algorithms and programming, computing systems, data and analysis, the impacts of computing, and networks and the internet. Topics introduced include abstraction, artificial intelligence, machine learning, the basics of cybersecurity, and object-oriented programming.

Cybersecurity

The Cybersecurity program provides students with the foundational knowledge of operating systems, networking and network operations, industry protocols and practices for securing computing systems, computer forensic concepts, and emerging technologies in cybersecurity.

Digital Game Development

The Digital Game Development program provides students with the principles of game mechanics. Areas of study include programming, story and character development, and artistic theory and concepts to develop a game.

Information Technology Networking

The Information Technology Networking program provides students with concepts in computer networking. Areas of study include safety procedures, network systems hardware, network protocols, and constructing and maintaining a network.

Web Design and Development

The Web Design and Development program provides students with concepts to develop and maintain websites. Areas of study include content development, backend programming, design and layout theories, and user interface.

Program Course Sequences
Information Technology

Program Name	Course Sequence	State Skill Standards*
Advanced Computer Science	**Core Course Sequence** Advanced Computer Science I Advanced Computer Science II or AP Computer Science A **Complementary Course(s)** Advanced Computer Science II LAB ** Advanced Computer Science Advanced Studies Software and App Development for Advanced Computer Science CTE Work Experience – Information Technology Industry-Recognized Credential – Advanced Computer Science	Advanced Computer Science Program of Study with Complementary Course Standards
Cybersecurity	**Core Course Sequence** Cybersecurity I Cybersecurity II **Complementary Course(s)** Cybersecurity II LAB ** Cybersecurity Advanced Studies Cryptography Ethical Hacking CTE Work Experience – Information Technology Industry-Recognized Credential –Cybersecurity	Cybersecurity Program of Study with Complementary Course Standards
Digital Game Development	**Core Course Sequence** Digital Game Development I Digital Game Development II **Complementary Course(s)** Digital Game Development II LAB ** Digital Game Development Advanced Studies 3D Animation for Digital Game Development Software and App Development for Digital Game Development CTE Work Experience – Information Technology Industry-Recognized Credential- Digital Game Development	Digital Game Development Program of Study with Complementary Course Standards
Information Technology Networking	**Core Course Sequence** CISCO IT Essentials/Intro to Cybersecurity CCNA I Introduction to Networking CCNA II Routing and Switching Essentials **Complementary Course(s)** IT Networking Advanced Studies CTE Work Experience – Information Technology	Information Technology Networking
Web Design and Development	**Core Course Sequence** Web Design and Development I Web Design and Development II **Complementary Course(s)** Web Design and Development II LAB ** Web Design and Development Advanced Studies 2D Animation for Web Design and Development UI/UX For Digital Applications for Web Design and Development CTE Work Experience – Information Technology Industry-Recognized Credential –Web Design and Development	Web Design and Development Program of Study with Complementary Course Standards

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Remaining Course Sequences for Sunsetted Programs
Information Technology

Applicable State Skill Standards are available on website until final program of study core course is completed. For course descriptions, please see the 2023-24 or 2024-25 Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

Program Name	Remaining Course(s) from Sunsetted Program Sequence	State Skill Standards*
Animation (Sunsetted 2023-24)	**Complementary Course(s)** Animation Advanced Studies (Last year offered 2025-26)	Animation
Computer Science (Sunsetted 2023-24)	**Complementary Course(s)** Computer Science Advanced Studies (Last year offered 2025-26)	Computer Science

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.
** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Course Descriptions
Information Technology

Advanced Computer Science I

Prerequisite: None (successful completion of Computer Science Principles is recommended but not required)

This course will introduce students to the essential concepts of computer science and show how computing and technology can influence the world. This course focuses on using technology and programming to solve computational problems and find creative solutions that reduce bias and equity deficits. Topics include classic algorithmic design, control structures, decomposition, modularity, abstraction, hardware and software, data analysis, developing programs, and troubleshooting. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Advanced Computer Science II (Option A)

Prerequisite: Advanced Computer Science I

This course is a continuation of Advanced Computer Science I. Topics to be explored include, advanced algorithms, conditional controls, recursion, the use of libraries, data collection and visualization tools, societal impacts of computing, basic networking and cloud computing, cybersecurity issues, and artificial intelligence. The students will continue to develop all skills learned in Advanced Computer Science I. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

AP Computer Science A (Option B)

Prerequisite: Advanced Computer Science I

This course follows The College Board Advanced Placement (AP) curriculum and prepares students for the AP Computer Science exam. This course provides advanced computer science students with instruction in advanced topics that include problem solving, design strategies and methodologies, data structures, algorithms, analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design. Students will learn to write, run, and debug solutions in the Java programming language, utilizing standard Java library classes. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Advanced Computer Science II LAB

Prerequisite: Concurrent enrollment in Advanced Computer Science II OR AP Computer Science A

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Advanced Computer Science Advanced Studies

Prerequisite: Completion of Advanced Computer Science Program of Study

This course is offered to students who have completed all content standards in the Advanced Computer Science program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Software and App Development for Advanced Computer Science

Prerequisite: Completion of Advanced Computer Science Program of Study

This course is offered to students who have completed all content standards in the Advanced Computer Science program and desire to pursue advanced study through investigation and in-depth research. This course expands the learner's knowledge of algorithms. It explores Dev Net and API frameworks that are integral to application and software development.

Industry-Recognized Credential – Advanced Computer Science

Prerequisite: Completion of Advanced Computer Science Program of Study

This course is offered to students who have completed all content standards in a program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Advanced Computer Science Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Cybersecurity I

Prerequisite: None

This course covers the fundamentals of computer hardware and software, as well as topics in safety procedures, design, maintenance, and repair, and an understanding of emerging technologies in this field. Students who complete this course will be able to describe the internal components of a computer, assemble a computer system, install and configure an operating system with peripherals, and troubleshoot using system tools and diagnostic software.

Cybersecurity II

Prerequisite: Cybersecurity I

This course is a continuation of Cybersecurity I. This course provides advanced cybersecurity students with computer forensics and incident handling, general theory on networks, and network troubleshooting. Students will learn to develop and execute an incident response plan, document an incident, determine investigative objectives, describe methods to trace offenders and use appropriate tools for computer forensics. Methods for deciphering encrypted data and a working knowledge of hard drive configuration are also covered. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Cybersecurity II LAB

Prerequisite: Concurrent enrollment in Cybersecurity II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Cybersecurity Advanced Studies

Prerequisite: Completion of Cybersecurity Program of Study

This course is offered to students who have completed all content standards in the Cybersecurity program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Cryptography

Prerequisite: Completion of Cybersecurity Program of Study

This course is offered to students who have completed all content standards in the Cybersecurity program of study. This course explores the field of ciphers and encrypted messages, as well as deciphering encrypted messages. Students will understand the historical context of cryptography and how it is used today, especially in cybersecurity and computer forensics.

Ethical Hacking

Prerequisite: Completion of Cybersecurity Program of Study

This course is offered to students who have completed all content standards in the Cybersecurity program of study. This course explores the field of ethical hacking. Students will learn about the stages of an attack, the tools and techniques used at each stage of an attack, how to perform a penetration test, and how to report the findings. Students will also learn concepts of shell scripting and Python scripting that are useful to ethical hackers.

Industry-Recognized Credential – Cybersecurity

Prerequisite: Completion of Cybersecurity Program of Study

This course is offered to students who have completed all content standards in the Cybersecurity program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Cybersecurity Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Digital Game Development I

Prerequisite: None

This course is designed to introduce students to the elements and structure of game programming and design. The areas of major emphasis in the course are game methodology, programming, game genres, game theory, 2D and 3D interactive experiences, and immersive environments. Students will apply both creative and technical skills to design and refine in addition to implementing the adventure. The appropriate use of technology is an integral part of this course.

Digital Game Development II

Prerequisite: Digital Game Development I

This course is a continuation of Digital Game Development I. This course provides intermediate digital game development students with instruction in advanced techniques and processes. The major areas of emphasis in the course will be development of characters, immersive environments, different genres, and exploration of multi-player games. Students will apply both creative and technical skills to design and refine in addition to implementing the adventure. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Digital Game Development II LAB

Prerequisite: Concurrent enrollment in Digital Game Development II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Digital Game Development Advanced Studies

Prerequisite: Completion of Digital Game Development Program of Study

This course is offered to students who have completed all content standards in the Digital Game Development program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

3D Animation for Digital Game Development

Prerequisite: Completion of Digital Game Development Program of Study

This course is offered to students who have completed all content standards in the Digital Game Development program and desire to pursue advanced study through investigation and in-depth research. This course introduces students to 3D animation, from preproduction, production, to postproduction. The design process will be applied to create 3D animation.

Software and App Development for Digital Game Development

Prerequisite: Completion of Digital Game Development Program of Study

This course is offered to students who have completed all content standards in the Digital Game Development program and desire to pursue advanced study through investigation and in-depth research. This course expands the learner's knowledge of algorithms. It explores Dev Net and API frameworks that are integral to application and software development.

Industry-Recognized Credential – Digital Game Development

Prerequisite: Completion of Digital Game Development Program of Study

This course is offered to students who have completed all content standards in the Digital Game Development program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Digital Game Development Program of Study. This course is designed to expand the students' opportunities to pursue

certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CISCO-IT Essentials

Prerequisite: None

This course introduces students to the fundamentals of computer hardware and software, mobile devices, security and networking concepts, and the responsibilities of an IT professional. Students will be able to describe the internal components of a computer and assemble a computer system. Students will be able to install and understand operating systems, connect via a networked environment, and troubleshoot using system tools and diagnostic software.

CISCO-Introduction to Cybersecurity

Prerequisite: CISCO-IT Essentials

This course explores the broad topic of cybersecurity including procedures to implement data confidentiality, integrity, availability, and security controls on networks, servers, and applications. Students will understand security principles and how to protect personal data and privacy online.

CCNA I Introduction to Networking

Prerequisite: CISCO-IT Essentials/CISCO-Introduction to Cybersecurity

This course covers basic networking concepts including networking architecture, structure, and functions; principles and structure of IP addressing; router hardware; network configurations; and the fundamentals of Ethernet concepts.

CCNA II Routing and Switching Essentials

Prerequisite: CISCO-CCNA I Introduction to Networking

This course covers the architecture, components, and operations of routers and switches in a network. Students will learn how to configure a router and a switch for basic functionality. Configuration implementation of monitoring tools is also addressed. Upon successful completion of this program, students will be prepared for CompTIA's A+ and the Cisco Certified Entry Networking Technician (CCENT) certification exams.

IT Networking Advanced Studies

Prerequisite: CISCO-CCNA II Routing and Switching Essentials

This course is offered to students who have completed all content standards in the Information Technology program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Web Design and Development I

Prerequisite: None

This course is designed to introduce students to the basic elements of web design and development. Students will learn about content placement, use of color and graphics, and typography using industry standard software. Students are introduced to various web design languages to build their websites, design concepts, and layout theory. Students will become familiar with marketing and other uses of websites; as well as security, ethical, legal, usability, and accessibility issues related to websites. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Web Design and Development II

Prerequisite: Web Design and Development I

This course is a continuation of Web Design and Development I. This course is designed for advanced students to create websites for a variety of purposes using advanced techniques and processes. Areas of study include automation, interactivity in websites, as well as databases, web servers, content management systems, and a more extensive knowledge of website construction. Students will explore emerging technologies in the web design and development field such as artificial intelligence and augmented reality. Project-based learning, collaboration, and portfolio development are essential elements of this class. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Web Design and Development II LAB

Prerequisite: Concurrent enrollment in Web Design and Development II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Web Design and Development Advanced Studies

Prerequisite: Completion of Web Design and Development Program of Study

This course is offered to students who have completed all content standards in the Web Design and Development program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

2D Animation for Web Design and Development

Prerequisite: Completion of Web Design and Development Program of Study

This course is offered to students who have completed all content standards in the Web Design and Development program of study and desire to pursue advanced study through investigation and in-depth research. This course expands on the students' knowledge of graphic design with an introduction to 2D animation from preproduction, through production, and postproduction. The design process will be applied to create 2D animation.

UI/UX For Digital Applications for Web Design and Development

Prerequisite: Completion of Web Design and Development Program of Study

This course is offered to students who have completed all content standards in the Web Design and Development program of study and desire to pursue advanced study through investigation and in-depth research. This course explores User Interface (UI) and User Experience (UX) for websites. UI/UX is about how a user interacts with a website to achieve the goals of the site. The nature of e-commerce and industry practices are discussed.

Industry-Recognized Credential – Web Design and Development

Prerequisite: Completion of Web Design and Development Program of Study

This course is offered to students who have completed all content standards in the Web Design and Development program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Web Design and Development Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Information Technology

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Information Technology

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Advanced Computer Science I	ADV COMPUTER SCIENCE I	11.0701	1	F	10152G1.0012
Advanced Computer Science II	ADV COMPUTER SCIENCE II	11.0701	1	F	10152G1.0022
Advanced Computer Science II LAB	ADV COMPUTER SCIENCE II L	11.0701	1	F	10152E1.0022
AP Computer Science A	AP COMPUTER SCI A	11.0701	1	F	10157G1.0022
Advanced Computer Science Advanced Studies	ADV COMPUTER SCIENCE AS	11.0701	1	F	10152E1.0011
Software and App Development for Advanced Computer Science	APP DEV ADV COMP SCI	11.0205	1	F	10160E1.0011
Industry-Recognized Credential – Advanced Computer Science	IRC ADV COMPUTER SCI	11.0701	1	F	10999E1.0011
Cybersecurity I	CYBRSECU I	11.1001	1	F	10020G1.0012
Cybersecurity II	CYBRSECU II	11.1001	1	F	10020G1.0022
Cybersecurity II LAB	CYBERSECU II L	11.1001	1	F	10020E1.0022
Cybersecurity Advanced Studies	CYBRSECU AS	11.1001	1	F	10020E1.0011
Cryptography	CRYPTO	11.1003	1	F	10055E1.0011
Ethical Hacking	ETHICAL HACK	43.0403	1	F	10108E1.0011
Industry-Recognized Credential – Cybersecurity	IRC CYBERSECU	11.1001	1	F	10999E1.0011
Digital Game Development I	DIG GAME DEV I	50.0411	1	N	10205G1.0012
Digital Game Development II	DIG GAME DEV II	50.0411	1	N	10205G1.0022
Digital Game Development II LAB	DIG GAME DEV II L	50.0411	1	N	10205E1.0022
Digital Game Development Advanced Studies	DIG GAME DEV AS	50.0411	1	N	10205E1.0011
3D Animation for Digital Game Development	3D ANIMATE DGD	50.0102	1	~~F~~ N	10205E1.0011
Software and App Development for Digital Game Development	APP DEV DGD	11.0205	1	F	10160E1.0011
Industry-Recognized Credential- Digital Game Development	IRC DIG GAME DEV	50.0411	1	N	10999E1.0011
Cisco IT Essentials	CISCO IT ESST	11.1002	.5	F	10102G0.5013
Cisco Introduction to Cybersecurity	CISCO IT CYBR	11.1002	.5	F	10102G0.5013
CCNA I Introduction to Networking	CISCO CCNA I	11.1002	1	F	10102G1.0023
CCNA II Routing and Switching Essentials	CISCO CCNA II	11.1002	1	F	10102G1.0033
IT Networking Advanced Studies	IT NETWKNG AS	11.1002	1	F	10102E1.0011
Web Design and Development I	WEB DESG DEV I	11.0801	1	N	10201G1.0012
Web Design and Development II	WEB DESG DEV II	11.0801	1	N	10201G1.0022
Web Design and Development II LAB	WEB DESG DEV II L	11.0801	1	N	10201E1.0022
Web Design and Development Advanced Studies	WEB DESG DEV AS	11.0801	1	N	10201E1.0011
2D Animation for Web Design and Development	2D ANIMATE WDD	10.0304	1	N	10204E1.0011
UI/UX for Digital Applications for Web Design and Development	UI/UX DIGI WDD	11.0801	1	~~F~~ N	10204E1.0011
Industry-Recognized Credential – Web Design and Development	IRC WEB DESG DEV	11.0801	1	N	10999E1.0011
CTE Work Experience – Information Technology	WORK EXPER IT	99.0011	1	F	10298G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Please note changes in Non-Trad for 3D Animation for Digital Game Development and UI/UX for Digital Applications for Web Design and Development.

Available Sunsetting Programs Courses
Information Technology

The following courses are from programs that are being, or have been, sunsetted. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Animation Advanced Studies	**ANIMATE AS**	**10.0304**	**1**	**N**	**05177E1.0011**
Computer Science Advanced Studies	**COMPUTER SCI AS**	**11.0701**	**1**	**F**	**10011E1.0011**

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment for
Law, Public Safety, Corrections and Security

This Career Cluster® is focused on planning, managing, and providing legal, public safety and protective services and homeland security, including professional and technical support services.

- Emergency Telecommunications
- Fire Science
- Forensic Science
- Law Enforcement

Program Descriptions
Law, Public Safety, Corrections, and Security

Emergency Telecommunications

The Emergency Telecommunications program is designed for the student interested in a career in the emergency communications field. Areas of study will include telecommunication centers, dispatching, use of 911 computer systems, participation in emergency scenarios, and call processing.

Fire Science

Schools must be approved by the governing State Agency in order to offer this program

The Fire Science program provides students with an introduction to fire science techniques and processes. The program provides the skills and knowledge related to safety, fire behavior, suppression, ventilation, building construction, awareness of hazardous materials, medical care, and wildland firefighting.

Forensic Science

The Forensic Science program introduces the principles and procedures employed in criminal and civil investigations. Areas of studies include scientific endeavors such as medicine, pathology, psychology, geology, entomology, fingerprint technology, chemistry, and biology. Emphasis will be put on gathering, analyzing, and interpreting physical evidence, using modern laboratory technologies and procedures.

Law Enforcement

The Law Enforcement program provides students with an introduction to law enforcement techniques and processes. Areas of study include basic functions of a law enforcement officer such as: written policies, quality control, court system, law, interrogations, use of force, and emergency management.

Program Course Sequences
Law, Public Safety, Corrections, and Security

Program Name	Course Sequence	State Skill Standards*
Emergency Telecommunications	**Core Course Sequence** Emergency Telecommunications I Emergency Telecommunications II **Complementary Course(s)** Emergency Telecommunications II Lab ** Emergency Telecommunications Advanced Studies CTE Work Experience – Law, Public Safety, Corrections, and Security Industry-Recognized Credential – Emergency Telecommunications	Emergency Telecommunications
Fire Science	**Core Course Sequence** Fire Science I Fire Science II **Complementary Course(s)** Fire Science Advanced Studies CTE Work Experience – Law, Public Safety, Corrections, and Security Industry-Recognized Credential – Fire Science	Fire Science
Forensic Science	**Core Course Sequence** Forensic Science I Forensic Science II **Complementary Course(s)** Forensic Science Advanced Studies CTE Work Experience – Law, Public Safety, Corrections, and Security Industry-Recognized Credential – Forensic Science	Forensic Science
Law Enforcement	**Core Course Sequence** Law Enforcement I Law Enforcement II **Complementary Course(s)** Law Enforcement Advanced Studies CTE Work Experience – Law, Public Safety, Corrections, and Security Industry-Recognized Credential – Law Enforcement	Law Enforcement

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Course Descriptions
Law, Public Safety, Corrections and Security

Emergency Telecommunications I

Prerequisite: None

This entry-level course is designed for the student interested in a career in the emergency communications field. Areas of study will include telecommunication centers, dispatching, use of 911 computer systems, participation in emergency scenarios, and call processing. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Emergency Telecommunications II

Prerequisite: Emergency Telecommunications I

This course is a continuation of Emergency Telecommunications I. This course allows advanced emergency telecommunications students to develop their knowledge and skills learned in Emergency Telecommunications I. Areas of study will include instruction using National Academies of Emergency Dispatch (NAED), management of emergency and non-emergency situations, operations of two-way radios, and computer-aided telecommunication software during catastrophic events. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Emergency Telecommunications II LAB

Prerequisite: Concurrent enrollment in Emergency Telecommunications II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Emergency Telecommunications Advanced Studies

Prerequisite: Completion of Emergency Telecommunications Program of Study

This course is offered to students who have completed all content standards in the Emergency Telecommunications program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Emergency Telecommunications

Prerequisite: Completion of Emergency Telecommunications Program of Study

This course is offered to students who have completed all content standards in the Emergency Telecommunications program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Emergency Telecommunications Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Fire Science I

Prerequisite: None

Schools must be approved by the governing State Agency in order to offer this course

This course introduces the principles and procedures employed in fire services. Students will practice response procedures in order to respond to small and catastrophic emergency incidents and will study firefighter safety, fire behavior, personal protective equipment, building construction, service equipment, and organizational rules that define guidelines that govern emergency fire management. Students will compare career fields and related careers to develop a personal perspective and an institutional professional growth plan to develop team building and leadership skills related to fire science.

Fire Science II

Prerequisite: Fire Science I

Schools must be approved by the governing State Agency in order to offer this course

This course is a continuation of Fire Science I. This course provides fire science students with instruction in advanced techniques and critical thinking. This course provides instruction in the primary factors affecting wildland fire behavior, suppression, ventilation, water supply, loss control, medical care, and awareness of potential hazards and human factors on the fire line. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Fire Science Advanced Studies

Prerequisite: Completion of Fire Science Program of Study

This course is offered to students who have completed all content standards in the Fire Science program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Fire Science

Prerequisite: Completion of Fire Science Program of Study

This course is offered to students who have completed all content standards in the Fire Science program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Fire Science Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Forensic Science I

Prerequisite: None

This course introduces the principles and procedures employed in criminal and civil investigations. Areas of study include history of forensic science, types of evidence, careers, legal and ethical issues, and exploring crime scenes. Emphasis will be put on gathering information that is used to collect evidence, practice unbiased testimony, crime scene photography, and crime scene procedures. The appropriate use of technology and industry-standards equipment is an integral part of this course.

Forensic Science II

Prerequisite: Forensic Science I

This course is a continuation of Forensic Science I. This course allows students interested in the forensic science field to develop their knowledge and skills in principles and procedures related to laboratory fundamentals and forensic disciplines. Areas of study include biological and chemical hazards, utilization of lab equipment, lab accreditation, examination of evidence, and fingerprinting processes. The appropriate use of technology and industry-standards equipment is an integral part of this course.

Forensic Science Advanced Studies

Prerequisite: Completion of Forensic Science Program of Study

This course is offered to students who have completed all content standards in the Forensic Science program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Forensic Science

Prerequisite: Completion of Forensic Science Program of Study

This course is offered to students who have completed all content standards in the Forensic Science program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Forensic Science Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Law Enforcement I

Prerequisite: None

This course will provide the foundations for students interested in careers in law enforcement and security. Areas of study include ethics, historical development of law enforcement, legal processes, and health and wellness. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Law Enforcement II

Prerequisite: Law Enforcement I

This course is a continuation of Law Enforcement I. This course provides intermediate law enforcement students with instruction in advanced techniques and processes. Areas of study will include basic functions of a law enforcement officer such as patrol functions, crisis intervention, investigations, interrogations, and introduction to the criminal justice system. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Law Enforcement Advanced Studies

Prerequisite: Completion of Law Enforcement Program of Study

This course is offered to students who have completed all content standards in the Law Enforcement program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Law Enforcement

Prerequisite: Completion of Law Enforcement Program of Study

This course is offered to students who have completed all content standards in the Law Enforcement program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Law Enforcement Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Law, Public Safety, Corrections, and Security

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Law, Public Safety, Corrections and Security

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Emergency Telecommunications I	EMER TELECOMM I	43.0399	1	F	15104G1.0012
Emergency Telecommunications II	EMER TELECOMM II	43.0399	1	F	15104G1.0022
Emergency Telecommunications LAB	EMER TELECOMM II L	43.0399	1	F	15104E1.0022
Emergency Telecommunications Advanced Studies	EMER TELECOMM AS	43.0399	1	F	15104E1.0011
Industry Recognized Credential- Emergency Telecommunications	IRC EMER TELECOMM	43.0399	1	~~N~~ F	14999E1.0011
Fire Science I	FIRE SCI I	43.0203	1	F	15151G1.0012
Fire Science II	FIRE SCI II	43.0203	1	F	15151G1.0022
Fire Science Advanced Studies	FIRE SCI AS	43.0203	1	F	15151E1.0011
Industry Recognized Credential- Fire Science	IRC- FIRE SCI	43.0203	1	~~N~~ F	15999E1.0011
Forensic Science I	FORENSIC SCI I	43.0406	1	N	15055G1.0012
Forensic Science II	FORENSIC SCI II	43.0406	1	N	15055G1.0022
Forensic Science Advanced Studies	FORENSIC SCI AS	43.0406	1	N	15055E1.0011
Industry Recognized Credential- Forensic Science	IRC- FORENSIC SCI	43.0406	1	N	15999E1.0011
Law Enforcement I	LAW ENFORCE I	43.0107	1	F	15054G1.0012
Law Enforcement II	LAW ENFORCE II	43.0107	1	F	15054G1.0022
Law Enforcement Advanced Studies	LAW ENFORCE AS	43.0107	1	F	15054E1.0011
Industry Recognized Credential- Law Enforcement	IRC- LAW ENFORCE	43.0107	1	F	15999E1.0011
CTE Work Experience – Law Public Safety Corrections and Security	WORK EXPER LAW	99.0012	1	F	15998G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Please note changes in Non-Trad for Industry Recognized Credential- Emergency Telecommunications and Industry Recognized Credential- Fire Science

Program Alignment for Manufacturing

This Career Cluster® is focused on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing, and process engineering.

- Advanced Manufacturing Technologies
- Electronic Technology
- Industrial Maintenance
- Metalworking
- Welding Technology

Program Descriptions
Manufacturing

Advanced Manufacturing Technologies

The Advanced Manufacturing Technologies program introduces students to the fundamentals of manufacturing and automation. Areas of emphasis include print reading, spatial reasoning, engineering design process, basic electrical and mechanical systems, additive and subtractive manufacturing processes, fundamentals of electronics, switches and relays, quality control, and an introduction to robotic systems in manufacturing.

Electronic Technology

The Electronic Technology program provides students the opportunity to develop technical skills that are used throughout the electronic industry. Areas of study include safety, tools, direct current (DC), alternating current (AC), schematics, soldering, measuring electricity, Ohm's/Watt's/Kirchhoff's Laws, electronic circuits, and digital theory.

Industrial Maintenance

The Industrial Maintenance program provides students the opportunity to learn the operation and maintenance of various mechanical, electrical, and fluid power systems that occur in various industry settings. Areas of study include safety, tools usage, print reading, fundamental energy principles, power systems, mechanical systems, fluid systems, and basic electrical systems. In additional advanced mechanical systems will be used, fasteners and joining systems will be applied and diagnostics and trouble-shooting techniques will be investigated.

Metalworking

The Metalworking program provides students with instruction in the various metalworking processes. Areas of study include safety procedures, print reading, measurement, properties of metals, machine operation, metal-fabricating methods, industrial applications, and problem-solving. Students will also be introduced to the principles of metallurgy, metal lathe operation, forging methods, casting process, welding, and heat-treating procedures.

Welding Technology

The Welding Technology program provides students with instruction in the industry standard welding practices. Areas of study include print reading, measurement, properties of metals, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux cored arc welding (FCAW), gas tungsten arc welding (GTAW), and thermal cutting.

Program Course Sequences
Manufacturing

Program Name	Course Sequence	State Skill Standards*
Advanced Manufacturing Technologies	**Core Course Sequence** Advanced Manufacturing Technologies I Advanced Manufacturing Technologies II **Complementary Course(s)** Advanced Manufacturing Technologies II Lab** Advanced Manufacturing Technologies Advanced Studies Advanced Manufacturing Practices CTE Work Experience – Manufacturing Industry-Recognized Credential – Advanced Manufacturing Technologies	Advanced Manufacturing Technologies
Electronic Technology	**Core Course Sequence** Electronic Technology I Electronic Technology II **Complementary Course(s)** Electronic Technology II LAB ** Electronic Technology Advanced Studies CTE Work Experience – Electronic Technology Industry-Recognized Credential- Electronic Technology	Electronic Technology
Industrial Maintenance	**Core Course Sequence** Industrial Maintenance I Industrial Maintenance II **Complementary Course(s)** Industrial Maintenance II LAB ** Industrial Maintenance Advanced Studies Millwright Processes CTE Work Experience – Manufacturing Industry-Recognized Credential – Industrial Maintenance	Industrial Maintenance
Metalworking	**Core Course Sequence** Metalworking I Metalworking II **Complementary Course(s)** Metalworking II LAB ** Metalworking Advanced Studies CTE Work Experience – Manufacturing Industry-Recognized Credential – Metalworking	Metalworking
Welding Technology	**Core Course Sequence** Welding Technology I Welding Technology II **Complementary Course(s)** Welding Technology II LAB ** Welding Technology Advanced Studies Welding Fabrication CTE Work Experience – Manufacturing Industry-Recognized Credential – Welding Technology	Welding Technology Program of Study with Complementary Course Standards

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Remaining Course Sequences for Sunsetted Programs
Manufacturing

Applicable State Skill Standards are available on website until final program of study core course is completed. For course descriptions, please see the 2023-24 or 2024-25 Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

Program Name	Remaining Course(s) from Sunsetted Program Sequence	State Skill Standards*
Automation Technology (Sunsetted 2023-24)	**Complementary Course(s)** Automation Technology Advanced Studies (Last year offered 2025-26)	Automation Technology
Manufacturing Technologies (Sunsetted 2023-24)	**Complementary Course(s)** Manufacturing Technologies Advanced Studies (Last year offered 2025-26)	Manufacturing Technologies
Mechanical Technology (Sunsetted 2023-24)	**Complementary Course(s)** Mechanical Technology Advanced Studies (Last year offered 2025-26)	Mechanical Technology
Metalworking (Sunsetted 2024-25 as a 3-year program of study)	**Core Course Sequence** Metalworking III (Last year offered 2025-26 as a 3-year program of study completer)	Metalworking

Course Descriptions
Manufacturing

Advanced Manufacturing Technologies I

Prerequisite: None

The Advanced Manufacturing Technologies I course introduces the students to the fundamental advanced manufacturing skills such as measuring techniques, mathematic operations, 3D modeling, and the materials used in manufacturing. The fundamentals of power systems, control devices and various manufacturing processes will be investigated in this course. The use of robotics in Advanced Manufacturing will also be introduced.

Advanced Manufacturing Technologies II

Prerequisite: Advanced Manufacturing Technologies I

This course is a continuation of Advanced Manufacturing Technologies I. This course expands on the fundamental advanced manufacturing skills such as utilizing schematics and technical drawings, investigating the engineering design process, 3D modeling, and the materials used in manufacturing. Continuing the identification and use of power systems, control devices, sensors, actuators, and programmable logic controllers. Various manufacturing processes will be demonstrated in this course. The use of robotics in Advanced Manufacturing will also be continued.

Advanced Manufacturing Technologies II LAB

Prerequisite: Concurrent enrollment in Advanced Manufacturing Technologies II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Advanced Manufacturing Technologies Advanced Studies

Prerequisite: Completion of Advanced Automation Technologies Program of Study

This course is offered to students who have completed all content standards in the Advanced Manufacturing Technologies program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Advanced Manufacturing Practices

Prerequisite: Completion of Advanced Manufacturing Technologies Program of Study

This course is offered to students who have completed all content standards in the Advanced Manufacturing Technologies program of study. This course provides advanced manufacturing technologies students the ability to further their skills and knowledge levels. Areas of emphasis include product development, quality control, principles of automation, use of programmable logic controllers, and diagnostic/troubleshooting practices. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Industry-Recognized Credential – Advanced Manufacturing Technologies

Prerequisite: Completion of Advanced Manufacturing Technologies Program of Study

This course is offered to students who have completed all content standards in the Advanced Manufacturing Technologies program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Advanced Manufacturing Technologies Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Electronic Technology I

Prerequisite: None

This course introduces the student to electronic practices and fundamentals, roles of electronics in industry, and career development. Topics include safety, tools, fundamental electronic theory, identification of components, analyzing quantities of components, basic direct current (DC), schematics, soldering, measuring electricity, Ohm's/Watt's/Kirchhoff's Laws, and electronic circuits. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Electronic Technology II

Prerequisite: Electronic Technology I

This course is a continuation of Electronic Technology I. This course introduces students to intermediate practices, principles, special equipment, and materials. Students will develop their knowledge and skills learned in Electronic Technology I. Topics include safety, voltage, current and resistance, parallel circuit configurations, series-parallel circuit configurations, alternating current (AC) circuits, fabrication techniques, interpreting schematics, troubleshooting techniques, analyzing digital design and circuitry, and such skills necessary to obtain meaningful employment in the electronics industry or advancement to postsecondary. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Electronic Technology II LAB

Prerequisite: Concurrent enrollment in Electronic Technology II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Electronic Technology Advanced Studies

Prerequisite: Completion of Electronic Technology Program of Study

This course is offered to students who have completed all content standards in the Electronic Technology program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Electronic Technology

Prerequisite: Completion of Electronic Technology Program of Study

This course is offered to students who have completed all content standards in the Electronic Technology program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Electronic Technology Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Industrial Maintenance I

Prerequisite: None

This course introduces students to the operation and maintenance of various mechanical, electrical, and fluid power systems that can be found in various industry settings. Content includes general skills in the use of tools, safety, equipment, materials, and problem solving. Fundamental skills such as the proper use of fasteners, safety practices, precision measuring tools, and electrical test equipment will be mastered.

Industrial Maintenance II

Prerequisite: Industrial Maintenance I

This course is a continuation of Industrial Maintenance I. This course provides intermediate industrial maintenance students opportunities to explore the various forms of power and mechanical systems. Areas of emphasis include advanced mechanical systems, advanced joining systems, diagnostic and troubleshooting procedures, and analog and digital electronic principles. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Industrial Maintenance II LAB

Prerequisite: Concurrent enrollment in Industrial Maintenance II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Industrial Maintenance Advanced Studies

Prerequisite: Completion of Industrial Maintenance Program of Study

This course is offered to students who have completed all content standards in the Industrial Maintenance program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Millwright Processes

Prerequisite: Completion of Industrial Maintenance Program of Study

This course is offered to students who have completed all content standards in the Industrial Maintenance program of study This course provides industrial maintenance students the ability to further their skills and knowledge levels. Areas of emphasis include power system principles, fastening and joining processes included in manufacturing and basic welding, application of fundamental electronic and instrumentation principles, including control technology and automation principles. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Industry-Recognized Credential – Industrial Maintenance

Prerequisite: Completion of Industrial Maintenance Program of Study

This course is offered to students who have completed all content standards in the Industrial Maintenance program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Industrial Maintenance Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Metalworking I

Prerequisite: None

This course introduces students to a general overview of metalworking processes. Students will gain an understanding of equipment, tools, safety procedures, machine operation, metal-fabricating methods, industrial applications, and problem solving. Students will be introduced to career opportunities and necessary job skills.

Metalworking II

Prerequisite: Metalworking I

This course is a continuation of Metalworking I. This course will enhance students' occupational levels of training, understanding, and skill development in the metal-working processes. Emphasis will be directed toward the principles of metallurgy, metal lathe operation, forging methods, casting process, welding, and heat-treating procedures. Advanced welding methods will be presented as well as career awareness and opportunities in the metals industries. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Metalworking II LAB

Prerequisite: Metalworking II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Metalworking Advanced Studies

Prerequisite: Completion of Metalworking Program of Study

This course is offered to students who have completed all content standards in the Metalworking program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Metalworking

Prerequisite: Completion of Metalworking Program of Study

This course is offered to students who have completed all content standards in the Metalworking program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Metalworking Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Welding Technology I

Prerequisite: None

This course will introduce the student to the concepts and practices in welding while allowing the more ambitious student to gain occupational training experience necessary to participate in various Welding Certifications. This course is intended to provide students with the basic knowledge, skills, and theory in the characteristics of metals, their structure and properties, and welding technologies. Students will gain an understanding of welding equipment, hand and power tools, safety procedures, print reading, measuring and scaling techniques, machine operation, industrial applications including Shielded Metal Arc Welding (SMAW) and Thermal Cutting processes, and provide them with entry-level skills for employment.

Welding Technology II

Prerequisite: Welding Technology I

This course is a continuation of Welding Technology I. This course provides intermediate welding students the ability to augment and further their skill and knowledge levels. Areas of study will include advanced layout and fabrication methodologies, continuation of shielded metal arc welding (SMAW) and thermal cutting processes, fabrication techniques and Gas Metal Arc Welding (GMAW)welding and GMAW Spray transfer on Carbon Steel, Flux Cored Arc Welding (FCAW) and FCAW spray transfer on carbon steel, and Gas Tungsten Arc Welding (GTAW) on carbon steel. All student activities are designed to enhance students' skill levels toward achievement of various welding certifications. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Welding Technology II LAB

Prerequisite: Concurrent enrollment in Welding Technology II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Welding Technology Advanced Studies

Prerequisite: Completion of Welding Technology Program of Study

This course is offered to students who have completed all content standards in the Welding Technology program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Welding Fabrication

Prerequisite: Completion of Welding Technology Program of Study

This course is offered to students who have completed all content standards in the Welding Technology program of study. This course provides welding technology students with the ability to further their skills and knowledge levels. Areas of study will include performance qualifications in shielded metal arc welding (SMAW), continuation of fabrication techniques and Gas Metal Arc Welding (GMAW)welding and GMAW Spray transfer on Carbon Steel, Flux Cored Arc Welding (FCAW) and FCAW spray transfer on carbon steel, Gas Tungsten Arc Welding (GTAW) on carbon steel, demonstrate welding inspection and testing principles. All student activities are designed to enhance students' skill levels toward achievement of various welding certifications. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Industry-Recognized Credential – Welding Technology

Prerequisite: Completion of Welding Technology Program of Study

This course is offered to students who have completed all content standards in the Welding Technology program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Welding Technology Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Manufacturing

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Manufacturing

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Advanced Manufacturing Technologies I	AMT I	15.0613	1	F	13104G1.0012
Advanced Manufacturing Technologies II	AMT II	15.0613	1	F	13104G1.0022
Advanced Manufacturing Technologies II LAB	AMT II L	15.0613	1	F	13104E1.0022
Advanced Manufacturing Technologies Advanced Studies	AMT AS	15.0613	1	F	13104E1.0011
Advanced Manufacturing Practices	ADV MFG PRAC	15.0613	1	F	13104E1.0011
Industry-Recognized Credential – Advanced Manufacturing Technologies	IRC AMT	15.0613	1	F	13999E1.0011
Electronic Technology I	ELEC TECH I	47.0105**	1	F	17101G1.0012
Electronic Technology II	ELEC TECH II	47.0105**	1	F	17101G1.0022
Electronic Technology II LAB	ELEC TECH II L	47.0105**	1	F	17101E1.0022
Electronic Technology Advanced Studies	ELEC TECH AS	47.0105**	1	F	17101E1.0011
Industry-Recognized Credential-Electronic Technology	IRC ELEC TECH	47.0105**	1	F	13999E1.0011
Industrial Maintenance I	IND MAINT I	47.0303	1	F	13303G1.0012
Industrial Maintenance II	IND MAINT II	47.0303	1	F	13303G1.0022
Industrial Maintenance II LAB	IND MAINT II L	47.0303	1	F	13303E1.0022
Industrial Maintenance Advanced Studies	IND MAINT AS	47.0303	1	F	13303E1.0011
Millwright Processes	MILL PROC	47.0303	1	F	13303E1.0011
Industry-Recognized Credential – Industrial Maintenance.	IRC IND MAINT	47.0303	1	F	13999E1.0011
Metalworking I	METAL WRKG I	48.0511	1	F	13202G1.0012
Metalworking II	METAL WRKG II	48.0511	1	F	13202G1.0022
Metalworking II LAB	METAL WRKG II L	48.0511	1	F	13202E1.0022
Metalworking Advanced Studies	METALWRKG AS	48.0511	1	F	13202E1.0011
Industry-Recognized Credential – Metalworking	METALWRKG AS	48.0511	1	F	13999E1.0011
Welding Technology I	WELDING TECH I	48.0508	1	F	13207G1.0012
Welding Technology II	WELDING TECH II	48.0508	1	F	13207G1.0022
Welding Technology II LAB	WELDING TECH II L	48.0508	1	F	13207E1.0022
Welding Technology Advanced Studies	WELDING TECH AS	48.0508	1	F	13207E1.0011
Welding Fabrication	WELD FAB	48.0508	1	F	13208E1.0011
Industry-Recognized Credential – Welding Technology	IRC WELDING	48.0508	1	F	13999E1.0011
CTE Work Experience - Manufacturing	WORK EXPER MANUF	99.0013	1	F	13098G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

**** The CIP code for Electronic Technology was listed incorrectly in both the 2023-24 catalog and the SCED Directory for 2023-24. Please update/correct in your IC data.**

Available Sunsetting Programs Courses
Manufacturing

The following courses are from programs that are being, or have been, sunsetted. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Automation Technology Advanced Studies	**AUTOMATION AS**	**14.4201**	**1**	**F**	**21010E1.0011**
Manufacturing Technologies Advanced Studies	**MANUF TECH AS**	**15.0613**	**1**	**F**	**13002E1.0011**
Mechanical Technology Advanced Studies	**MECH TECH AS**	**47.0303**	**1**	**F**	**13102E1.0011**
Metalworking III	**METAL WRKG III**	**48.0511**	**1**	**F**	**13202G1.0033**

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment for Marketing

This Career Cluster® is focused on planning, managing, and performing marketing activities to reach organizational objectives.

- Marketing

Program Description
Marketing

Marketing

The Marketing program provides students with the overall principles of marketing and business administration. Areas of study include economic systems, business fundamentals, marketing information, product/service management, promotion, pricing, and professional selling.

Program Course Sequences
Marketing

Program Name	Course Sequence	State Skill Standards*
Marketing	**Core Course Sequence** Principles of Business and Marketing Marketing I **Complementary Course(s)** Marketing Advanced Studies Marketing Entrepreneurship CTE Work Experience – Marketing Industry-Recognized Credential – Marketing	Marketing Program of Study with Complementary Courses

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

Course Descriptions
Marketing

Principles of Business and Marketing

Prerequisite: None

This course is an entry-level course in the Business Management and Marketing programs that develops student understanding and skill in areas such as business law, communications, customer relations, economics, information management, marketing, and operations. Students acquire knowledge of fundamental business and marketing activities, factors affecting business, develop verbal and written communications skills, and participate in career exploration and planning.

Marketing I

Prerequisite: Principles of Business and Marketing

This course is a continuation of the Marketing program. Students will learn and practice skills in the functional areas of marketing: channel management, marketing-information management, market planning, market research, pricing, promotion, product management, and professional selling. Ethical and legal issues of these functions will be covered. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Marketing Advanced Studies

Prerequisite: Completion of Marketing Program of Study

This course is offered to students who have completed all content standards in the Marketing program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Marketing Entrepreneurship

Prerequisite: Completion of Marketing Program of Study

This course is offered to students who have completed all content standards in the Marketing program of study. The Entrepreneurship course is designed to introduce students to the nature and scope of entrepreneurship, the impact on market economies, marketing functions and economic concepts related to entrepreneurship. Business plan development is the key tool by which students will learn concepts. Personal traits and behaviors of successful entrepreneurs will also be examined.

Industry-Recognized Credential – Marketing

Prerequisite: Completion of Marketing Program of Study

This course is offered to students who have completed all content standards in the Marketing program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Marketing Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Marketing

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Marketing

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Marketing I	**MKTG I**	**52.1401**	**1**	**N**	**12152G1.0022**
Marketing Advanced Studies	**MKTG AS**	**52.1401**	**1**	**N**	**12152E1.0011**
Marketing Entrepreneurship	**MKTG ENTREPRENEUR**	**52.0701**	**1**	**N**	**12053E1.0011**
Principles of Business and Marketing	**PRIN BUS MTKG**	**52.0101**	**1**	**F**	**12051G1.0012**
Industry-Recognized Credential – Marketing	**IRC MKTG**	**52.1401**	**1**	**F**	**12199E1.0011**
CTE Work Experience – Marketing	**WORK EXPER MARKET**	**99.0014**	**1**	**N**	**12198G1.0011**

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Program Alignment for
Science, Technology, Engineering, and Mathematics

This Career Cluster® is focused on planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

- Energy Technologies
- Engineering Foundations

Program Descriptions
Science, Technology, Engineering, and Mathematics

Energy Technologies

The Energy Technologies program introduces students to the power industry. Students will gain an understanding of the engineering design process, various energy sources, energy forms, energy principles, efficiency concepts, electricity, and electrical principles. In addition, construct energy systems, model the uses of various sources of energy and energy efficiency, and conservation will be explored in this program.

Engineering Foundations

The Engineering Foundations program provides students the opportunity to learn various aspects of engineering fundamentals that would be required for any engineering field. Areas of study include safety, the engineering design process, impacts of engineering on society, sketching and documentation methods, material properties, power systems and energy principles, as well as statistics and kinematic principles.

Program Course Sequences
Science, Technology, Engineering, and Mathematics

Program Name	Course Sequence	State Skill Standards*
Energy Technologies	**Core Course Sequence** Energy Technologies I Energy Technologies II **Complementary Course(s)** Energy Technologies Advanced Studies Energy Technologies Practices CTE Work Experience – Science, Technology, Engineering, and Mathematics Industry Recognized Credentials- Energy Technologies	Energy Technologies
Engineering Foundations	**Core Course Sequence** Engineering Foundations I Engineering Foundations II **Complementary Course(s)** Engineering Foundations II LAB ** Engineering Foundations Advanced Studies Aerospace Engineering Architectural and Civil Engineering Electrical Engineering Environmental Engineering Mechanical Engineering CTE Work Experience – Science, Technology, Engineering, and Mathematics Industry Recognized Credential- Engineering Foundations	Engineering Foundations Program of Study with Complementary Courses

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.
** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Remaining Course Sequences for Sunsetted Programs
Science, Technology, Engineering, and Mathematics

Applicable State Skill Standards are available on website until final program of study core course is completed. For course descriptions, please see the 2023-24 or 2024-25 Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

Program Name	Remaining Course(s) from Sunsetted Program Sequence	State Skill Standards*
Aerospace Engineering (sunsetted 2023-24)	**Complementary Course(s)** Engineering Design and Development (Last year 2025-26)	Aerospace Engineering
Architectural and Civil Engineering (sunsetted 2023-24)	**Complementary Course(s)** Engineering Design and Development (Last year 2025-26)	Architectural and Civil Engineering
Electrical Engineering (sunsetted 2023-24)	**Complementary Course(s)** Engineering Design and Development (Last year 2025-26)	Electrical Engineering
Environmental Engineering (sunsetted 2023-24)	**Complementary Course(s)** Engineering Design and Development (Last year 2025-26)	Environmental Engineering
Mechanical Engineering (sunsetted 2023-24)	**Complementary Course(s)** Engineering Design and Development (Last year 2025-26)	Mechanical Engineering

Course Descriptions
Science, Technology, Engineering, and Mathematics

Energy Technologies I

Prerequisite: None

This course introduces students to the energy industry. Students will gain an understanding of safety procedures, equipment, tools, basic electricity principles, and the various energy sources. Students will also explore environmental impacts and availability of energy resources. Students will apply the engineering design process to technologies to explore energy principles. Students will be introduced to career opportunities and necessary job skills related to the various forms of energy.

Energy Technologies II

Prerequisite: Energy Technologies I

This course is a continuation of Energy Technologies I. This course provides intermediate energy technologies students with instruction in energy forms, energy principles, efficiency concepts, building systems, and policies. Students will engage in the use and development of energy conversion systems. Areas of emphasis include solar energy, wind energy, and geothermal energy resources. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Energy Technologies Advanced Studies

Prerequisite: Completion of Energy Technologies Program of Study

This course is offered to students who have completed all content standards in the Energy Technologies program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Energy Technologies Practices

Prerequisite: Completion of Energy Technologies Program of Study

This course is offered to students who have completed all content standards in the Energy Technologies program of study. Students explore in-depth study of power distribution systems, electrical circuits, and electrical measurements. Applied knowledge of energy technologies includes calculating series resistance, parallel resistance, and the function, operation, testing, and resetting of a circuit breaker. Electrical control wiring, grounding control systems, the introduction to transformers, and ways to identify energy efficiency and conservation are additional topics of exploration in this course.

Industry-Recognized Credential – Energy Technologies

Prerequisite: Completion of Energy Technologies Program of Study

This course is offered to students who have completed all content standards in the Energy Technologies program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Energy Technologies Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Engineering Foundations I

Prerequisite: None

This course is the entry-level course of the Engineering curriculum. The major focus of this course is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry-standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community.

Engineering Foundations II

Prerequisite: Engineering Foundations I

This course is a continuation of the Engineering curriculum. This survey course exposes students to major concepts they will encounter in a postsecondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work, and communicate solutions.

Engineering Foundations II LAB

Prerequisite: Concurrent enrollment in Engineering Foundations II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Engineering Foundations Advanced Studies

Prerequisite: Completion of Engineering Foundations Program of Study

This course is offered to students who have completed all content standards in the Engineering Foundations program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Aerospace Engineering

Prerequisite: Completion of Engineering Foundations Program of Study

This course is offered to students who have completed all content standards in the Engineering Foundations program of study. This course explores the evolution of flight, navigation and control, flight fundamentals, aerospace materials, propulsion, space travel, and orbital mechanics. In addition, this course presents alternative applications for aerospace engineering concepts. Students analyze, design, and build aerospace systems. They apply knowledge gained throughout the course in a final presentation about the future of the industry and their professional goals.

Architectural and Civil Engineering

Prerequisite: Completion of Engineering Foundations Program of Study

This course is offered to students who have completed all content standards in the Engineering Foundations program of study. Students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects.

Electrical Engineering

Prerequisite: Completion of Engineering Foundations Program of Study

This course is offered to students who have completed all content standards in the Engineering Foundations program of study. Digital electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras, and high-definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards, and technical documentation.

Environmental Engineering

Prerequisite: Completion of Engineering Foundations Program of Study

This course is offered to students who have completed all content standards in the Engineering Foundations program of study. In this course students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply issues, and renewable energy. Applying knowledge of engineering, biology, and ecology through hands-on activities and simulations, students research and design potential solutions to these true-to-life challenges.

Mechanical Engineering

Prerequisite: Completion of Engineering Foundations Program of Study

This course is offered to students who have completed all content standards in the Engineering Foundations program of study. Students explore how things are made and the different processes that go into creating various products. Additionally, students learn about the history of manufacturing, the evolution of robotics and automation, manufacturing processes, computer modeling, manufacturing equipment, and flexible manufacturing systems.

Industry-Recognized Credential – Engineering Foundations

Prerequisite: Completion of Engineering Foundations Program of Study

This course is offered to students who have completed all content standards in the Engineering Foundations program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Engineering Foundations Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Science, Technology, Engineering, and Mathematics

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Science, Technology, Engineering, and Mathematics

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Energy Technologies I	ENERGY TECH I	15.1701	1	F	03012G1.0012
Energy Technologies II	ENERGY TECH II	15.1701	1	F	03012G1.0022
Energy Technologies Advanced Studies	ENERGY TECH AS	15.1701	1	F	03012E1.0011
Energy Technologies Practices	ENERGY TECH PRAC	14.4801	1	F	03012E1.0011
Industry-Recognized Credential – Energy Technologies	IRC ENERGY TECH	15.1701	1	F	21999E1.0011
Engineering Foundations I	ENG FOUND I	14.0101	1	F	21005G1.0012
Engineering Foundations II	ENG FOUND II	14.0101	1	F	21005G1.0022
Engineering Foundations II LAB	ENG FOUND II L	14.0101	1	F	21005E1.0011
Engineering Foundations Advanced Studies	ENG FOUND AS	14.0101	1	F	21005E1.0011
Aerospace Engineering	AEROSPACE ENG	14.0201	1	F	21013E1.0011
Architecture and Civil Engineering	CIVIL ENG	14.0401	1	F	21011E1.0011
Electrical Engineering	ELEC ENG	~~15.0303~~ 14.1001	1	F	21008E1.0011
Environmental Engineering	ENVIRON SUS ENG	14.0501	1	F	21014E1.0011
Mechanical Engineering	MECH ENGR	14.1901	1	F	21010E1.0011
Industry-Recognized Credential – Engineering Foundations	IRC ENG FOUND	14.0101	1	F	21999E1.0011
CTE Work Experience – Science, Technology, Engineering, and Mathematics	WORK EXPER STEM	99.0015	1	F	21998G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Please note change to Electrical Engineering CIP Code.

Available Sunsetting Programs Courses
Science, Technology, Engineering, and Mathematics

The following Advanced Studies course is from programs that have been sunsetted.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Engineering Design and Development	ENG DESG DEV	14.0101	1	F	21025E1.0011

Program Alignment for Transportation, Distribution, and Logistics

This Career Cluster® is focused on planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment, and facility maintenance.

- Automotive Technology
- Aviation Maintenance Technician
- Aviation Technology
- Diesel Technology

Program Descriptions
Transportation, Distribution and Logistics

Automotive Technology

The Automotive Technology program provides students with instruction in the operational and scientific nature of the automotive component systems including fuel, intake, exhaust, ignition, lubrication, braking, heating and cooling, electrical, and suspension systems. This program is aligned with the NATEF Maintenance and Light Repair (MLR) program standards.

Aviation Maintenance Technician

The Aviation Maintenance Technician program will introduce students to the operational and scientific nature of the aviation maintenance industry. This program will introduce students to safe working habits, components of a reciprocating engine, aircraft control systems, and avionics systems.

Aviation Technology

The Aviation Technology program introduces students to the principles of flight, the aircraft flight environment, aircraft performance standards, flight controls, metrology, radio communications, flight planning, Federal Aviation Administration (FAA) regulations, navigation, the human body in flight, airman decision-making, accident prevention, Airman Information Manual, and the fundamentals of instrument flight. This course prepares the students to take the FAA Part 61.109 Private Pilot Written Exam.

Diesel Technology

The Diesel Technology program provides students with fundamental diesel systems theory, service, and repair. It will introduce the operational and scientific nature of diesel systems. It will provide students with a basic knowledge of diesel systems and operating principles. Areas of study include engines, steering and suspension, preventative maintenance, hydraulics, electrical systems, and braking systems.

Program Course Sequences
Transportation, Distribution, and Logistics

Program Name	Course Sequence	State Skill Standards*
Automotive Technology	**Core Course Sequence** Automotive Technology I Automotive Technology II **Complementary Course(s)** Automotive Technology II LAB ** Automotive Technology Advanced Studies Intermediate Automotive Technology CTE Work Experience – Transportation, Distribution, and Logistics Industry-Recognized Credential – Automotive Technology	Automotive Technology Program of Study with Complementary Courses
Aviation Maintenance Technician	Core Course Sequence Aviation Maintenance Technician I Aviation Maintenance Technician II **Complementary Course(s)** Aviation Maintenance Technician Advanced Studies CTE Work Experience – Transportation, Distribution, and Logistics Industry-Recognized Credential – Aviation Maintenance Technician	Aviation Maintenance Technician
Aviation Technology	**Core Course Sequence** Aviation Technology I Aviation Technology II **Complementary Course(s)** Aviation Technology Advanced Studies Pilot Preparation CTE Work Experience – Transportation, Distribution, and Logistics Industry-Recognized Credential – Aviation Technology	Aviation Technology Program of Study with Complementary Courses
Diesel Technology	**Core Course Sequence** Diesel Technology I Diesel Technology II **Complementary Course(s)** Diesel Technology II LAB ** Diesel Technology Advanced Studies Diesel Applied Concepts CTE Work Experience – Transportation, Distribution, and Logistics Industry-Recognized Credential – Diesel Technology	Diesel Technology Program of Study with Complementary Courses

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.

** Lab courses are to be taught concurrently with the associated course – see individual course descriptions for requirements and prerequisites.

Remaining Course Sequences for Sunsetted Programs
Transportation, Distribution, and Logistics

Applicable State Skill Standards are available on website until final program of study core course is completed. For course descriptions, please see the 2023-24 or 2024-25 Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

Program Name	Remaining Course(s) from Sunsetted Program Sequence	State Skill Standards*
Automotive Service Technician (Sunsetted 2023-24)	**Core Course Sequence** Automotive Service Technician IV (Last year offered 2025-26 as completer) **Complementary Course(s)** Automotive Service Technician IV LAB ** (Last year offered 2025-26)	Automotive Service Technician

Course Descriptions
Transportation, Distribution and Logistics

Automotive Technology I

Prerequisite: None

This course will introduce students to the operational and scientific nature of the automotive component systems including fuel, intake, exhaust, ignition, lubrication, braking, cooling, and suspension systems. Practical application of safe work habits and the correct use of tools and precision test instruments will be emphasized throughout the course.

Automotive Technology II

Prerequisite: Automotive Technology I

This course is a continuation of Automotive Technology I. This course provides intermediate automotive technology students with laboratory activities including tasks with advanced equipment to diagnose and service modern automotive systems. This course focuses on safety, engine repair, automatic transmission, manual transmission, manual drive train, drive axles, clutch systems, suspension and steering, heating and air conditioning, engine performance, braking systems, and basic electrical systems. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Automotive Technology II LAB

Prerequisite: Concurrent enrollment in Automotive Technology II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Automotive Technology Advanced Studies

Prerequisite: Completion of Automotive Technology Program of Study

This course is offered to students who have completed all content standards in the Automotive Technology program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Intermediate Automotive Technology

Prerequisite: Completion of Automotive Technology Program of Study

This course is offered to students who have completed all content standards in the Automotive Technology program of study. This course provides advanced automotive technology students with in-depth study and skill development in the repair of automotive engines, engine performance, machine operations, steering and suspension service, drive train service, and air conditioning system service by providing additional instruction in the ASE standard areas. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course students will have received advanced level skills to move into employment or continue in postsecondary education.

Industry-Recognized Credential – Automotive Technology

Prerequisite: Completion of Automotive Technology Program of Study

This course is offered to students who have completed all content standards in the Automotive Technology program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Automotive Technology Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Aviation Maintenance Technician I

Prerequisite: None

This course will introduce students to the operational nature of the aviation maintenance industry. This course will introduce students to the practical application of safe work habits and the correct use of tools and precision test instruments. Students will practice safe working habits and learn the components of a reciprocating engine, aircraft control systems, and avionics systems. The course will include aircraft service requirements, ground operation procedures, and calculating the cost associated with aircraft preventative maintenance. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Aviation Maintenance Technician II

Prerequisite: Aviation Maintenance Technician I

This course is a continuation of Aviation Maintenance Technician I. This course provides intermediate aviation maintenance technician students with instruction in general aeronautics. It includes the study of physical mathematics, common and special tools and measuring devices, fluid lines, hardware, aircraft servicing, and documentation (Part 65). The appropriate use of technology and industry-standard equipment is an integral part of this course.

Aviation Maintenance Technician Advanced Studies

Prerequisite: Completion of Aviation Maintenance Technician Program of Study

This course is offered to students who have completed all content standards in the Aviation Maintenance Technician program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Industry-Recognized Credential – Aviation Maintenance Technician

Prerequisite: Completion of Aviation Maintenance Technician Program of Study

This course is offered to students who have completed all content standards in the Aviation Maintenance Technician program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Aviation Maintenance Technician Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Aviation Technology I

Prerequisite: None

This course is designed as an introduction to general aeronautics. It includes the study of the impact of aviation on society, physical mathematics, common and special tools and measuring devices, physics of flight, aerodynamics of flight, and analyzing aeronautical charts. It provides basic information on the principles, fundamentals, and technical procedures in the areas of aircraft, aerospace, and aviation professions. Students will learn the principles of flight and navigation, and the flight environment of an aerospace vehicle. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Aviation Technology II

Prerequisite: Aviation Technology I

This course is a continuation of Aviation Technology I. This course provides intermediate aviation technology students with an in-depth knowledge about the systems and structures found on today's aircraft. Students will become familiar with aircraft structural materials, coverings, electrical systems, hydraulics, computer systems, environmental systems, safety equipment, control systems, power plants, and avionics. Through the knowledge gained in studying aircraft systems and structures, students will learn the fundamentals to maintain and safely operate an aircraft. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Aviation Technology Advanced Studies

Prerequisite: Completion of Aviation Technology Program of Study

This course is offered to students who have completed all content standards in the Aviation Technology program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Pilot Preparation

Prerequisite: Completion of Aviation Technology Program of Study

This course is offered to students who have completed all content standards in the Aviation Technology program of study. This course provides advanced aviation technology students with instruction in techniques and processes and will prepare students to successfully take the Federal Aviation Administration (FAA) Part 61.105b Private Pilot Knowledge Test. This course introduces students to the principles of flight, the aircraft flight environment, aircraft performance standards, flight controls, metrology, radio communications, flight planning, FAA regulations, navigation, the human body in flight, airman decision-making, accident prevention, Airman Information Manual (AIM), and the fundamentals of instrument flight. This course prepares the students to take the FAA Part 61.109 Private Pilot Written Exam. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Industry-Recognized Credential – Aviation Technology

Prerequisite: Completion of Aviation Technology Program of Study

This course is offered to students who have completed all content standards in the Aviation Technology program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Aviation Technology Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

Diesel Technology I

Prerequisite: None

This course provides students with fundamental diesel systems theory, service, and repair. It will introduce the operational and scientific nature of diesel systems. It will provide students with a basic knowledge of diesel systems such as fuel systems, air induction, exhaust and engine break cooling systems and lubrication requirements and procedures. It also includes fundamental concepts of drivetrains, general electrical systems and fundamentals of tires, wheels, steering, and suspension. The students will study the technological nature of diesel-powered equipment. The proper and safe use of tools and precision test equipment will be emphasized throughout the course.

Diesel Technology II

Prerequisite: Diesel Technology I

This course is a continuation of Diesel Technology I. This course is designed to provide intermediate students with knowledge of diesel systems operating principles and the applications of diesel power. Areas of study may include diesel engine repair such as cylinder head and valve train service evaluation and repair, fundamental concepts of hydraulics and hydraulic systems, general electronic systems hydraulic brake system, wheel bearing service and repair and steering systems. In addition, preventative maintenance inspection and service concepts will be practiced. Practical application of safe work habits and the correct use of tools, shop equipment, and precision test instruments will be emphasized throughout the course. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Diesel Technology II LAB

Prerequisite: Concurrent enrollment in Diesel Technology II

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Diesel Technology Advanced Studies

Prerequisite: Completion of Diesel Technology Program of Study

This course is offered to students who have completed all content standards in the Diesel Technology program of study and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

Diesel Applied Concepts

Prerequisite: Completion of Diesel Technology Program of Study

This course is offered to students who have completed all content standards in the Diesel Technology program of study. This course provides diesel technology students with in-depth study and skill development as applied to diesel engines. It includes lubrication systems, cooling systems service and repair, air induction and exhaust systems, fuel supply systems, and an introduction to diesel emissions. In addition, applications in drive train repair, electric and electronic systems, brake systems and suspension, steering and chassis service, hydraulic systems, and heating, ventilation and air conditioning (HVAC) systems are developed. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course students will have received advanced level skills to move into employment or continue in postsecondary education.

Industry-Recognized Credential – Diesel Technology

Prerequisite: Completion of Diesel Technology Program of Study

This course is offered to students who have completed all content standards in the Diesel Technology program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Diesel Technology Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.

CTE Work Experience – Transportation, Distribution, and Logistics

Prerequisite: Completion of Level 2 course in the qualifying program of study

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

Course Data Information
Transportation, Distribution and Logistics

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Automotive Technology I	AUTO TECH I	47.0600	1	F	20104G1.0012
Automotive Technology II	AUTO TECH II	47.0600	1	F	20104G1.0022
Automotive Technology II LAB	AUTO TECH II L	47.0600	1	F	20104E1.0022
Automotive Technology Advanced Studies	AUTO TECH AS	47.0600	1	F	20104E1.0011
Intermediate Automotive Technology	INT AUTO TECH	47.0600	1	F	20104E1.0011
Industry-Recognized Credential – Automotive Technology	IRC AUTO TECH	47.0600	1	F	20999E1.0011
Aviation Maintenance Technician I	AVI MAINT TECH I	47.0608	1	F	20113G1.0012
Aviation Maintenance Technician II	AVI MAINT TECH II	47.0608	1	F	20113G1.0022
Aviation Maintenance Technician Advanced Studies	AVI MAINT TECH AS	47.0608	1	F	20113E1.0011
Industry-Recognized Credential – Aviation Maintenance Technician	IRC AVI MAINT TECH	47.0608	1	F	20999E1.0011
Aviation Technology I	AVIATION TECH I	49.0101	1	F	20053G1.0012
Aviation Technology II	AVIATION TECH II	49.0101	1	F	20053G1.0022
Aviation Technology Advanced Studies	AVIATION TECH AS	49.0101	1	F	20053E1.0011
Pilot Preparation	PILOT PREP	36.0202	1	F	20055E1.0011
Industry-Recognized Credential – Aviation Technology	IRC AVIATION TECH	49.0101	1	F	20999E1.0011
Diesel Technology I	DIESEL TECH I	47.0605	1	F	20107G1.0012
Diesel Technology II	DIESEL TECH II	47.0605	1	F	20107G1.0022
Diesel Technology II LAB	DIESEL TECH II L	47.0605	1	F	20107E1.0022
Diesel Technology Advanced Studies	DIESEL TECH AS	47.0605	1	F	20107E1.0011
Diesel Applied Concepts	DIESEL CONCEPTS	47.0605	1	F	20107E1.0011
Industry-Recognized Credential – Diesel Technology	IRC DIESEL TECH	47.0605	1	F	20999E1.0011
CTE Work Experience - Transportation Distribution, and Logistics	WORK EXPER TRANS	99.0016	1	F	20998G1.0011

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Available Sunsetting Programs Courses
Transportation, Distribution, and Logistics

The following courses are from programs that are being, or have been, sunsetted. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Automotive Service Technician IV	AUTO SERV IV	47.0604	1	F	20106G1.0044
Automotive Service Technician IV LAB	AUTO SERV IV L	47.0604	1	F	20106E1.0044

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.

Middle School Course Descriptions

Agriculture, Food, and Natural Resources

Ag Ventures

Prerequisite: None

This one-semester course introduces middle school students to the world of agriculture and natural resources. Areas of study will include exploration of plant and animal science, food science, agricultural mechanics, and leadership development through projects and hands-on learning. Career exploration and an introduction to career and technical education programs of study are integral to the course.

Arts, A/V Technology, and Communications

Digital Designers

Prerequisite: None

This one-semester course introduces middle school students to the world of digital media. Areas of study will include exploration in principles of design, photography, video, web design, and leadership development through projects and hands-on learning. Career exploration and an introduction to career and technical education programs of study are integral to the course.

Business Management and Administration

Business Innovators

Prerequisite: None

This one-semester course introduces middle school students to the world of business through projects and hands-on learning. Areas of study include exploration of business terms, marketing concepts, entrepreneurship, and leadership development. Career exploration and an introduction to career and technical education programs of study are integral to the course.

Health Science

Everyday Heroes

Prerequisite: None

This one-semester course introduces middle school students to the world of health care and first responders. Areas of study will include exploration of basic anatomy, public safety, medical concepts, first aid, and leadership through projects and hands-on learning. Career exploration and an introduction to career and technical education programs of study are integral to the course.

Human Services

Teening to Adulting

Prerequisite: None

This one-semester course introduces middle school students to the world of education, hospitality, and human services. Areas of study include the exploration of foods and wellness, family dynamics, design in clothing and housing, education and care of children, and leadership development through projects and hands-on learning. Career exploration and an introduction to career and technical education programs of study are integral to the course.

Science, Technology, Engineering, and Mathematics

Building Engineers I

Prerequisite: None

This one-semester course introduces middle school students to the world of skilled and technical sciences through hands-on projects and interactive learning. Areas of study will include exploration of tools and safety, measurement, design process, robotics, power and energy, and leadership development. Career exploration and an introduction to career and technical education programs of study are integral to the course.

Building Engineers II

Prerequisite: Building Engineers I

This one-semester course introduces middle school students to advanced concepts in skilled and technical sciences through hands-on projects and interactive learning. Areas of study will include exploration of engineering design process, robotics, automation, power and energy, and coding. Career exploration and an introduction to career and technical education programs of study are integral to the course.

Course Data Information
Middle School

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Ag Ventures *(middle school)*	AG VENTUR	01.0000	0.50	N	18001X060811
Building Engineers I (middle school)	BUILDING ENG 1	15.0000	0.50	F	21052X060812
Building Engineers II (middle school)	BUILDING ENG 2	15.0000	0.50	F	21052X060822
Business Innovators (middle school)	BUSINES INNOV	52.0101	0.50	F	12001X060811
Digital Designers (middle school)	DIGITAL DESI	09.0102	0.50	N	11001X060811
Everyday Heroes (middle school)	EVER HEROES	51.0000	0.50	N	14001X060811
Teening to Adulting (middle school)	TEEN ADULT	19.1001	0.50	N	19001X060811

Please see CTE SCED Directory for additional information on CTE SCED, Levels, and other data elements. Please ensure that your district's SCED sequencing is correctly entered into IC to ensure data pulls are accurate.