

***Nevada***  
***Career and Technical Education (CTE)***  
***Course Catalog***  
***2023-24***



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**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*



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## 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/or high-demand careers. 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 includes 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 will be implemented for those programs with current industry validated standards.

## Course Descriptions

The **course descriptions** are organized alphabetically within each program area's Career Cluster and include the course prerequisites and description. 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 for an 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. SCED Codes are made up of four main elements:

- Subject Area and Course Number are the first five numbers included in this catalog;
- Course Levels used by CRALEO are "G" (general courses that are core to a sequence), "E" (enhanced courses such as Labs, Complementary Courses, and Advanced Studies), 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, while a "22" course is the second course in a two-course sequence). 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., Medical Assisting with Medical Assisting 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 the completion of the program of study with continued instruction in the specific pathway(s). They should be entered with a Course Level of "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.

### Sunsetting

Below is the list of **Programs of Study that will be sunsetting** this year. For students who began a program of study in or prior to the 2022-23 school year, please refer to the appropriate Nevada Career and Technical Course Catalog for course information and sequence to be followed to complete these Programs of Study. Sunsetting programs and their available courses are listed in the applicable tables within the clusters.

#### **Agriculture, Food, and Natural Resources**

- Agricultural Mechanics Technology

#### **Architecture and Construction**

- Architectural Design
- Drafting and Design
- Interior Design

#### **Arts, A/V Technology, and Communications**

- Fashion, Textiles, and Design (3-year)
- Graphic Design (3-year)
- Photography
- Radio Production (3-year)
- Theatre Technology (3-year)
- Video Production (3-year)

#### **Business Management and Administration**

- Administrative Services
- Business Management - High School of Business™
- Business Management – National Academy Foundation™ Academy of Finance

#### **Education and Training**

- Early Childhood Education (3-year)

#### **Finance**

None

#### **Government and Public Administration**

None

#### **Health Science**

- Dental Science (3-year)
- Emergency Medical Technician (3 year)
- Health Information Management
- Medical Assisting (3-year)
- Pharmacy Practice
- Respiratory Science

**Hospitality and Tourism**

- Baking and Pastry
- Culinary Arts (3-year)
- Hospitality and Tourism (3-year)
- National Academy Foundation™ Academy of Hospitality and Tourism

**Human Services**

- Family and Consumer Sciences (4-year)
- Foods and Nutrition
- Human Development

**Information Technology**

- Animation
- Computer Science
- Cybersecurity (3-year)
- Web Design and Development (3-year)

**Law, Public Safety, Corrections, and Security**

- Criminal Justice
- Law Enforcement (3-year)

**Manufacturing**

- Automation Technology
- Electronic Technology (3-year)
- Manufacturing Technologies
- Mechanical Technology

**Marketing**

None

**Science, Technology, Engineering, and Mathematics**

- Aerospace Engineering
- Architectural and Civil Engineering
- Electrical Engineering
- Environmental Engineering
- Mechanical Engineering

**Transportation, Distribution, and Logistics**

- Automotive Service Technician
- Aviation Maintenance Technician (3-year)
- Aviation Technology (3-year)
- Diesel Technology (3-year)

## New or Revised Programs of Study

Below is a list of **new or revised Programs of Study** and their sequence. They are listed by Career Cluster for consistency with the catalog organization. Industry-Recognized Credential courses have been added to some Programs of Study and will be listed in the course sequence tables, program descriptions, and course data information table. Additional complementary courses may be offered beginning in 2024-25 and will be listed in the 2024-25 Nevada CTE Course Catalog.

### Agriculture, Food, and Natural Resources

#### Agricultural Welding, Power, and Structure Technology

New program of study. Below is the course sequence:

- Agricultural Welding, Power, and Structure Technology I
- Agricultural Welding, Power, and Structure Technology II
- 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

### Architecture and Construction

#### Design Drafting

New program of study. Below is the course sequence:

- Design Drafting I
- Design Drafting II
- Design Drafting II Lab
- Design Drafting Advanced Studies
- CTE Work Experience – Architecture and Construction
- Industry-Recognized Credential – Design Drafting

#### Heating, Ventilation, Air Conditioning, and Refrigeration

Heating, Ventilation, Air Conditioning, and Refrigeration III was renamed Intermediate Heating, Ventilation, Air Conditioning, and Refrigeration and the Heating, Ventilation, Air Conditioning, and Refrigeration III Lab was removed.

### Arts, A/V Technology, and Communications

#### Fashion, Textiles, and Design

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Fashion Design and Construction I
- Fashion Design and Construction II
- Fashion Design and Construction II Lab
- Fashion Design and Construction Advanced Studies
- CTE Work Experience – Arts, A/V Technology, and Communications
- Industry-Recognized Credential – Fashion, Textiles, and Design

#### Graphic Design

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Graphic Design I
- Graphic Design II
- Graphic Design II Lab
- Graphic Design Advanced Studies
- CTE Work Experience – Arts, A/V Technology, and Communications
- Industry-Recognized Credential – Graphic Design

**Radio Production**

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Radio Production I
- Radio Production II
- Radio Production Advanced Studies
- CTE Work Experience – Arts, A/V Technology, and Communications

**Video Production**

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Video Production I
- Video Production II
- Video Production II Lab
- Video Production Advanced Studies
- CTE Work Experience – Arts, A/V Technology, and Communications
- Industry-Recognized Credential – Video Production

**Business Management and Administration****Logistics Management**

New program of study. Below is the course sequence:

- Introduction to Office and Logistics Management
- Logistics Management
- Logistics Management Advanced Studies
- CTE Work Experience – Business Management and Administration
- Industry-Recognized Credential – Logistics Management

**Office Management**

New program of study. Below is the course sequence:

- Introduction to Office and Logistics Management
- Office Management
- Office Management Advanced Studies
- CTE Work Experience – Business Management and Administration
- Industry-Recognized Credential – Office Management

**Education and Training****Early Childhood Education**

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Early Childhood Education I
- Early Childhood Education II
- Early Childhood Education II Lab
- Early Childhood Education Advanced Studies
- CTE Work Experience – Education and Training
- Industry-Recognized Credential – Early Childhood Education

**Finance**

None

**Government and Public Administration**

Added CTE Work Experience – Government and Public Administration

## Health Science

### Dental Science

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Dental Science I
- Dental Science II
- Dental Science Advanced Studies
- CTE Work Experience – Health Science

### Emergency Medical Technician

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Principles of Health Science
- Emergency Medical Technician
- Emergency Medical Technician Lab
- Emergency Medical Technician Advanced Studies
- CTE Work Experience – Health Science

### Medical Assisting

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Principles of Health Science
- Medical Assisting
- Medical Assisting Advanced Studies
- CTE Work Experience – Health Science
- Industry-Recognized Credential – Medical Assisting

## Hospitality and Tourism

### Culinary Arts

Standards revised to become 2-year program of study. Below is the course sequence:

- Culinary Arts I
- Culinary Arts II
- Culinary Arts II Lab
- Culinary Arts Advanced Studies
- CTE Work Experience – Hospitality and Tourism
- Industry-Recognized Credential – Culinary Arts

### Hospitality and Tourism

Standards revised to become 2-year program of study. Below is the course sequence:

- Hospitality and Tourism I
- Hospitality and Tourism II
- Hospitality and Tourism II Lab
- Hospitality and Tourism Advanced Studies
- CTE Work Experience – Hospitality and Tourism
- Industry-Recognized Credential – Hospitality and Tourism

## Human Services

### Cosmetology

Standards were updated to meet current industry standards with no changes to the course sequence.

**Family and Consumer Sciences**

Standards revised to become 2-year program of study. Below is the course sequence:

- Family and Consumer Sciences I
- Family and Consumer Sciences II
- Family and Consumer Sciences Advanced Studies
- CTE Work Experience – Human Services
- Industry-Recognized Credential – Family and Consumer Sciences

**Information Technology****Advanced Computer Science**

New program of study. Below is the course sequence:

- Advanced Computer Science I
- Advanced Computer Science II
- Advanced Computer Science II Lab
- Advanced Computer Science Advanced Studies
- CTE Work Experience – Information Technology
- Industry-Recognized Credential – Advanced Computer Science

**Cybersecurity**

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Cybersecurity I
- Cybersecurity II
- Cybersecurity Advanced Studies
- CTE Work Experience – Information Technology
- Industry-Recognized Credential – Cybersecurity

**Web Design and Development**

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Web Design and Development I
- Web Design and Development II
- Web Design and Development II Lab
- Web Design and Development Advanced Studies
- CTE Work Experience – Information Technology
- Industry-Recognized Credential – Web Design and Development

**Law, Public Safety, Corrections, and Security****Law Enforcement**

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Law Enforcement I
- Law Enforcement II
- Law Enforcement Advanced Studies
- CTE Work Experience – Law, Public Safety, Corrections, and Security

**Manufacturing****Advanced Manufacturing Technologies**

New program of study. Below is the course sequence:

- Advanced Manufacturing Technologies I
- Advanced Manufacturing Technologies II
- Advanced Manufacturing Technologies II Lab
- Advanced Manufacturing Advanced Studies
- CTE Work Experience – Manufacturing
- Industry-Recognized Credential – Advanced Manufacturing Technologies

**Electronic Technology**

New program of study. Below is the course sequence:

- Electronic Technology I
- Electronic Technology II
- Electronic Technology II Lab
- Electronic Technology Advanced Studies
- CTE Work Experience – Manufacturing

**Industrial Maintenance**

New program of study. Below is the course sequence:

- Industrial Maintenance I
- Industrial Maintenance II
- Industrial Maintenance II Lab
- Industrial Maintenance Advanced Studies
- CTE Work Experience – Manufacturing
- Industry-Recognized Credential – Industrial Maintenance

**Marketing**

None

**Science, Technology, Engineering, and Mathematics****Engineering Foundations**

New program of study. Below is the course sequence:

- Engineering Foundations I
- Engineering Foundations II
- Engineering Foundations II Lab
- Engineering Foundations Advanced Studies
- CTE Work Experience – Science, Technology, Engineering, and Mathematics

**Transportation, Distribution, and Logistics****Automotive Technology**

Automotive Technology III was renamed Intermediate Automotive Technology and the Automotive Technology III Lab was removed.

**Aviation Maintenance Technician**

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Aviation Maintenance Technician I
- Aviation Maintenance Technician II
- Aviation Maintenance Technician Advanced Studies
- CTE Work Experience – Transportation, Distribution, and Logistics
- Industry-Recognized Credential – Aviation Maintenance Technician

**Aviation Technology**

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Aviation Technology I
- Aviation Technology II
- Aviation Technology Advanced Studies
- CTE Work Experience – Transportation, Distribution, and Logistics
- Industry-Recognized Credential – Aviation Technology

**Diesel Technology**

Standards revised to become a 2-year program of study. Below is the new course sequence:

- Diesel Technology I
- Diesel Technology II
- Diesel Technology II Lab
- Diesel Technology Advanced Studies
- CTE Work Experience – Transportation, Distribution, and Logistics
- Industry-Recognized Credential – Diesel Technology

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## ***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	<b>Core Course Sequence</b> Agricultural Welding, Power, and Structure Technology I Agricultural Welding, Power, and Structure Technology II <b>Complementary Course(s)</b> 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	<b>Core Course Sequence</b> Principles of Agriculture, Food, and Natural Resources Animal Science <b>Complementary Course(s)</b> Animal Science Advanced Studies CTE Work Experience – Agriculture, Food, and Natural Resources Industry-Recognized Credential – Animal Systems	Animal Systems
Plant Systems	<b>Core Course Sequence</b> Principles of Agriculture, Food, and Natural Resources Plant Science <b>Complementary Course(s)</b> Plant Science Advanced Studies CTE Work Experience – Agriculture, Food, and Natural Resources Industry-Recognized Credential – Plant Systems	Plant Systems

\* 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 Sunsetting 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 the [2021-22](#) or [2022-23](#) 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 Sunsetting Program Sequence	State Skill Standards*
Agricultural Business Systems (Sunsetting 2022-23)	<b>Core Course Sequence</b> Agricultural Business (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Agricultural Business Advanced Studies (Last year offered 2024-25)	Agriculture Business Systems
Agricultural Leadership, Communication and Policy (Sunsetting 2022-23)	<b>Core Course Sequence</b> Agricultural Leadership Communication and Policy (LCP) (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Agricultural LCP Advanced Studies (Last year offered 2024-25)	Agriculture Leadership, Communication and Policy
Agricultural Mechanics Technology (Sunsetting 2023-24)	<b>Core Course Sequence</b> Agricultural Mechanics Technology II (Last year offered 2023-24) Agricultural Mechanics Technology III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Agricultural Mechanics Technology Advanced Studies (Last year offered 2025-26)	Agricultural Mechanics Technology
Animal Science (Sunsetting 2022-23)	<b>Core Course Sequence</b> Animal Science (Last year offered 2023-24 as a 3-year completer)	Animal Science
Biotechnology (Sunsetting 2022-23)	<b>Core Course Sequence</b> Biotechnology (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Biotechnology Advanced Studies (Last year offered 2024-25)	Biotechnology
Environmental Management (Sunsetting 2022-23)	<b>Core Course Sequence</b> Environmental Management III (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Environmental Management Advanced Studies (Last year offered 2024-25)	Environmental Management
Floriculture Design and Management (Sunsetting 2022-23)	<b>Core Course Sequence</b> Floriculture (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Floriculture Advanced Studies (Last year offered 2024-25)	Floriculture Design and Management
Food Science Technology (Sunsetting 2022-23)	<b>Core Course Sequence</b> Food Science Technology (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Food Science Technology Advanced Studies (Last year offered 2024-25)	Food Science Technology
Landscape Design and Management (Sunsetting 2022-23)	<b>Core Course Sequence</b> Landscaping II (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Landscaping Advanced Studies (Last year offered 2024-25)	Landscape Design and Management

Program Name	Remaining Course(s) from Sunsetting Program Sequence	State Skill Standards*
Natural Resources and Wildlife Management (Sunsetting 2022-23)	<b>Core Course Sequence</b> Natural Resources and Wildlife Management (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Natural Resources and Wildlife Management Advanced Studies (Last year offered 2024-25)	Natural Resources and Wildlife Management
Ornamental Horticulture Greenhouse Management (Sunsetting 2022-23)	<b>Core Course Sequence</b> Greenhouse Management (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Greenhouse Management Advanced Studies (Last year offered 2024-25)	Ornamental Horticulture/Greenhouse Management
Veterinary Science (Sunsetting 2022-23)	<b>Core Course Sequence</b> Veterinary Science (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Veterinary Science Advanced Studies (Last year offered 2024-25)	Veterinary Science

\* 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 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 – 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 a 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 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 – Animal Systems**

*Prerequisite: Completion of Animal Systems 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 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 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 – Plant Systems**

*Prerequisite: Completion of Plant Systems 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 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	18401
Agricultural Welding, Power, and Structure Technology II	AGWPS II	01.0205	1	F	18401
Agricultural Welding, Power, and Structure Technology II LAB	AGWPS II L	01.0205	1	F	18401
Agricultural Welding, Power, and Structure Technology Advanced Studies	AGWPS AS	01.0205	1	F	18405
Industry-Recognized Credential – Agricultural Welding, Power, and Structure Technology	IRC AGWPS	01.0205	1	F	18999
Animal Science	ANIMAL SCI	01.0901	1	F	18101
Animal Science Advanced Studies	ANIMAL SCI AS	01.0901	1	F	18101
Industry-Recognized Credential – Animal Systems	IRC ANIMAL SYS	01.0901	1	F	18999
Plant Science	PLANT SCI	01.1101	1	F	18051
Plant Science Advanced Studies	PLANT SCI AS	01.1101	1	F	18051
Industry-Recognized Credential – Plant Systems	IRC PLANT SYS	01.1101	1	F	18999
Principles of Agriculture, Food, and Natural Resources	AG SCIENCE	01.0000	1	N	18003
CTE Work Experience – Agriculture, Food, and Natural Resources	WORK EXPER AFNR	99.0001	1	N	18998

*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 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 Business	AG BUSINESS	01.0102	1	F	18201
Agricultural Business Advanced Studies	AG BUSINESS AS	01.0102	1	F	18201
Agricultural Leadership Communication and Policy	AG LEADERSHIP	01.0899	1	N	18203
Agricultural LCP Advanced Studies	AG LEADERSHIP AS	01.0899	1	N	18203
Agricultural Mechanics Technology II	AG MECH TECH II	01.0205	1	F	18402
Agricultural Mechanics Technology III	AG MECH TECH III	01.0205	1	F	18402
Agricultural Mechanics Technology Advanced Studies	AG MECH TECH AS	01.0205	1	F	18402
Animal Science	ANIMAL SCI	01.0901	1	F	18101
Biotechnology	BIO TECH	26.1201	1	N	18308
Biotechnology Advanced Studies	BIO TECH AS	26.1201	1	N	18308
Environmental Management III	ENVIRON MGMT III	03.0101	1	N	18504
Environmental Management Advanced Studies	ENVIRON MGMT AS	03.0101	1	N	18504
Floriculture	FLORAL	01.0608	1	N	18056
Floriculture Advanced Studies	FLORAL AS	01.0608	1	N	18056
Food Science Technology	FOOD SCI TECH	01.1002	1	N	18305
Food Science Technology Advanced Studies	FOOD SCI TECH AS	01.1002	1	N	18305
Greenhouse Management	GREENHOUSE MGMT	01.0604	1	F	18053
Greenhouse Management Advanced Studies	GREENHOUSE MGMT AS	01.0604	1	F	18053
Landscaping II	LANDSCAPE II	01.0605	1	F	18054
Landscaping Advanced Studies	LANDSCAPE AS	01.0605	1	F	18054
Natural Resources and Wildlife Management	NAT RES MGMT	03.0601	1	N	18501
Natural Resources and Wildlife Management Advanced Studies	NAT RES MGMT AS	03.0601	1	N	18501
Veterinary Science	VETERINARY SCI	01.0903	1	F	18105
Veterinary Science Advanced Studies	VETERINARY SCI AS	01.0903	1	F	18105

*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.*

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## ***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	<b>Core Course Sequence</b> Building Trades in Construction Technology I Building Trades in Construction Technology II <b>Complementary Course(s)</b> Building Trades in Construction Technology II LAB ** Building Trades in Construction Technology Advanced Studies CTE Work Experience - Architecture and Construction Industry-Recognized Credential – Building Trades in Construction Technology	Building Trades in Construction Technology
Design Drafting	<b>Core Course Sequence</b> Design Drafting I Design Drafting II <b>Complementary Course(s)</b> Design Drafting II LAB ** Design Drafting Advanced Studies CTE Work Experience - Architecture and Construction Industry-Recognized Credential – Design Drafting	Drafting and Design
Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR)	<b>Core Course Sequence</b> Heating, Ventilation, Air Conditioning, and Refrigeration I Heating, Ventilation, Air Conditioning, and Refrigeration II <b>Complementary Courses</b> 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)

\* 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 Sunsetting 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 the [2021-22](#) or [2022-23](#) 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 Sunsetting Program Sequence	State Skill Standards*
Architectural Design (Sunsetting 2023-24)	<b>Core Course Sequence</b> Architectural Design II (Last year offered 2023-24) Architectural Design III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Architectural Design II LAB ** (Last year offered 2023-24) Architectural Design III LAB ** (Last year offered 2024-25) Architectural Design Advanced Studies (Last year offered 2025-26)	Architectural Design
Construction Technology (Sunsetting 2022-23)	<b>Core Course Sequence</b> Construction Technology III (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Construction Technology III LAB ** (Last year offered 2023-24) Construction Technology Advanced Studies (Last year offered 2024-25)	Construction Technology
Drafting and Design (Sunsetting 2023-24)	<b>Core Course Sequence</b> Drafting and Design II (Last year offered 2023-24) Drafting and Design III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Drafting and Design II LAB ** (Last year offered 2023-24) Drafting and Design III LAB ** (Last year offered 2024-25) Drafting and Design Advanced Studies (Last year offered 2025-26)	Drafting and Design
Furniture and Cabinetmaking (Sunsetting 2022-23)	<b>Core Course Sequence</b> Furniture and Cabinetmaking III (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Furniture and Cabinetmaking Advanced Studies (Last year offered 2024-25)	Furniture and Cabinetmaking
Interior Design (Sunsetting 2023-24)	<b>Core Course Sequence</b> Interior Design II (Last year offered 2023-24) Interior Design III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Interior Design II LAB ** (Last year offered 2023-24) Interior Design III LAB ** (Last year offered 2024-25) 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 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 – 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 in a 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, and 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 I*

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 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 – Design Drafting

*Prerequisite: Completion of Design Drafting 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 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.

## 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 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.

**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.

**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 a 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	17003
Building Trades in Construction Technology II	BUILD CONST TECH II	46.0000	1	F	17003
Building Trades in Construction Technology II LAB	BUILD CONST TECH II LAB	46.0000	1	F	17003
Building Trades in Construction Technology Advanced Studies	BUILD CONST TECH AS	46.0000	1	F	17003
Industry-Recognized Credential – Building Trades in Construction Technology	IRC BUILD CONST TECH	46.0000	1	F	17999
Design Drafting I	DES DRAFT I	15.1302	1	F	21102
Design Drafting II	DES DRAFT II	15.1302	1	F	21102
Design Drafting II Lab	DES DRAFT II L	15.1302	1	F	21102
Design Drafting Advanced Studies	DES DRAFT AS	15.1302	1	F	21102
Industry-Recognized Credential – Design Drafting	IRC DES DRAFT	15.1302	1	F	17999
Heating, Ventilation, Air Conditioning, and Refrigeration I	HVACR I	47.0201	1	F	17055
Heating, Ventilation, Air Conditioning, and Refrigeration II	HVACR II	47.0201	1	F	17055
Heating, Ventilation, Air Conditioning, and Refrigeration II Lab	HVACR II L	47.0201	1	F	17055
Heating, Ventilation, Air Conditioning, and Refrigeration Advanced Studies	HVACR AS	47.0201	1	F	17055
Industry-Recognized Credential – Heating, Ventilation, Air Conditioning, and Refrigeration	IRC HVACR	47.0201	1	F	17999
Intermediate Heating, Ventilation, Air Conditioning, and Refrigeration	INT HVACR	47.0201	1	F	17055
CTE Work Experience - Architecture and Construction	WORK EXPER CONST	99.0002	1	F	17998

*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, sunsetting. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Architectural Design II	ARCH DESG II	04.0901	1	F	05192
Architectural Design II LAB	ARCH DESG II L	04.0901	1	F	05192
Architectural Design III	ARCH DESG III	04.0901	1	F	05192
Architectural Design III LAB	ARCH DESG III L	04.0901	1	F	05192
Architectural Design Advanced Studies	ARCH DESG AS	04.0901	1	F	05192
Construction Technology III	CONST TECH III	46.0000	1	F	17002
Construction Technology III LAB	CONST TECH III L	46.0000	1	F	17002
Construction Technology Advanced Studies	CONST TECH AS	46.0000	1	F	17002
Drafting and Design II	CADD II	15.1302	1	F	21103
Drafting and Design II LAB	CADD II L	15.1302	1	F	21103
Drafting and Design III	CADD III	15.1302	1	F	21103
Drafting and Design III LAB	CADD III L	15.1302	1	F	21103
Drafting and Design Advanced Studies	CADD AS	15.1302	1	F	21103
Furniture and Cabinetmaking III	FURN CABINET III	48.0702	1	F	17007
Furniture and Cabinetmaking Advanced Studies	FURN CABINET AS	48.0702	1	F	17007
Interior Design II	INT DESIGN II	50.0408	1	N	05193
Interior Design II LAB	INT DESIGN II L	50.0408	1	N	05193
Interior Design III	INT DESIGN III	50.0408	1	N	05193
Interior Design III LAB	INT DESIGN III L	50.0408	1	N	05193
Interior Design Advanced Studies	INT DESIGN AS	50.0408	1	N	05193
CTE Work Experience - Architecture and Construction	WORK EXPER CONST	99.0002	1	F	17998

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.

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## ***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 video 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	<p><b>Core Course Sequence</b> Fashion Design and Construction I Fashion Design and Construction II</p> <p><b>Complementary Course(s)</b> Fashion Design and Construction II Lab ** Fashion Design and Construction Advanced Studies CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential – Fashion, Textiles, and Design</p>	Fashion, Textiles, and Design
Graphic Design	<p><b>Core Course Sequence</b> Graphic Design I Graphic Design II</p> <p><b>Complementary Course(s)</b> Graphic Design II LAB ** Graphic Design Advanced Studies CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential – Graphic Design</p>	Graphic Design
Multimedia Communications	<p><b>Core Course Sequence</b> Multimedia Communications I Multimedia Communications II</p> <p><b>Complementary Course(s)</b> Multimedia Communications Advanced Studies CTE Work Experience – Arts, A/V Technology, and Communication</p>	Multimedia Communications
Radio Production	<p><b>Core Course Sequence</b> Radio Production I Radio Production II</p> <p><b>Complementary Course(s)</b> Radio Production Advanced Studies CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential – Radio Production</p>	Radio Production
Theatre Technology	<p><b>Core Course Sequence</b> Theatre Technology I Theatre Technology II</p> <p><b>Complementary Course(s)</b> Theatre Technology Advanced Studies CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential – Theatre Technology</p>	Theatre Technology
Video Production	<p><b>Core Course Sequence</b> Video Production I Video Production II</p> <p><b>Complementary Course(s)</b> Video Production II LAB ** Video Production Advanced Studies CTE Work Experience – Arts, A/V Technology, and Communication Industry-Recognized Credential – Video Production</p>	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 Sunsetting 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 the [2021-22](#) or [2022-23](#) 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 Sunsetting Program Sequence	State Skill Standards*
Fashion, Textiles, and Design (Sunsetting as a 3-year program of study 2023-24)	<b>Core Course Sequence</b> Fashion Design and Construction II (Last year offered 2023-24 as part of 3-year program of study) Fashion Design and Construction III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Pattern Drafting (Last year offered 2024-25)	Fashion, Textiles, and Design
Graphic Design (Sunsetting as a 3-year program of study 2023-24)	<b>Core Course Sequence</b> Graphic Design II (Last year offered 2023-24 as part of 3-year program of study) Graphic Design III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Graphic Design II LAB ** Graphic Design III LAB ** (Last year offered 2024-25)	Graphic Design
Photography (Sunsetting 2023-24)	<b>Core Course Sequence</b> Photography II (Last year offered 2023-24) Photography III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Photography Advanced Studies (Last year offered 2024-25)	Photography
Radio Production (Sunsetting as a 3-year program of study 2023-24)	<b>Core Course Sequence</b> Radio Production II (Last year offered 2023-24 as part of 3-year program of study) Radio Production III (Last year offered 2024-25 as completer)	Radio Production
Theatre Technology (Sunsetting as a 3-year program of study 2023-24)	<b>Core Course Sequence</b> Theatre Technology II (Last year offered 2023-24 as part of 3-year program of study) Theatre Technology III (Last year offered 2024-25 as completer)	Theatre Technology
Video Production (Sunsetting as a 3-year program of study 2023-24)	<b>Core Course Sequence</b> Video Production II (Last year offered 2023-24 as part of 3-year program of study) Video Production III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Video Production II LAB ** Video Production III LAB ** (Last year offered 2024-25)	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.

## ***Course Descriptions***

### ***Arts, A/V Technology, and Communications***

#### **Fashion Design and Construction 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 Design and Construction II**

*Prerequisite: Fashion, Design, and Construction I*

This course is a continuation of Fashion Design and Construction 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 Design and Construction II LAB**

*Prerequisite: Concurrent enrollment in Fashion, Design, and Construction 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 Design and Construction 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 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 – 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 a 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 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 – Graphic Design

*Prerequisite: Completion of Graphic Design 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 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 Advanced Studies**

*Prerequisite: Completion of Multimedia Communications 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 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.

**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 broadcast. 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 Advanced Studies**

*Prerequisite: Completion of Radio Production 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 – Radio Production**

*Prerequisite: Completion of Radio Production 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 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 a 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 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 – Theatre Technology

*Prerequisite: Completion of Theatre Technology 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 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 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 – Video Production**

*Prerequisite: Completion of Video Production 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 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 Design and Construction I	FASHION CONST I	50.0407	1	N	05190
Fashion Design and Construction II	FASHION CONST II	50.0407	1	N	05190
Fashion Design and Construction II Lab	FASHION CONST II L	50.0407	1	N	05190
Fashion Design and Construction Advanced Studies	FASHION CONST AS	50.0407	1	N	05190
Industry-Recognized Credential - Fashion, Textiles, and Design	IRC FASHION CONST	50.0407	1	N	10249
Graphic Design I	GRAPHIC DESG I	50.0409	1	N	11153
Graphic Design II	GRAPHIC DESG II	50.0409	1	N	11153
Graphic Design II LAB	GRAPHIC DESG II L	50.0409	1	N	11153
Graphic Design Advanced Studies	GRAPHIC DESG AS	50.0409	1	N	11153
Industry-Recognized Credential - Graphic Design	IRC GRAPHIC DESG	50.0409	1	N	10249
Multimedia Communications I	MULTIMEDIA COM I	09.0702	1	N	10203
Multimedia Communications II	MULTIMEDIA COM II	09.0702	1	N	10203
Multimedia Communications Advanced Studies	MULTIMEDIA COM AS	09.0702	1	N	10203
Radio Production I	RADIO PROD I	10.0202	1	F	11107
Radio Production II	RADIO PROD II	10.0202	1	F	11107
Radio Production Advanced Studies	RADIO PROD AS	10.0202	1	F	11107
Industry-Recognized Credential – Radio Production	IRC RADIO PROD	10.0202	1	F	10249
Theatre Technology I	THEATRE TECH I	50.0502	1	N	05056
Theatre Technology II	THEATRE TECH II	50.0502	1	N	05056
Theatre Technology Advanced Studies	THEATRE TECH AS	50.0502	1	N	05056
Industry-Recognized Credential - Theatre Technology	IRC THEATRE TECH	50.0502	1	N	10249
Video Production I	VIDEO PROD I	50.0602	1	F	11051
Video Production II	VIDEO PROD II	50.0602	1	F	11051
Video Production II LAB	VIDEO PROD II L	50.0602	1	F	11051
Video Production Advanced Studies	VIDEO PROD AS	50.0602	1	F	11051
Industry-Recognized Credential - Video Production	IRC VIDEO PROD	50.0602	1	F	10249
CTE Work Experience - Arts A/V Technology and Communication	WORK EXPER TECH	99.0003	1	N	10248

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, sunsetting. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Fashion Design and Construction II	FASHION CONST II	50.0407	1	N	05190
Fashion Design and Construction III	FASHION CONST III	50.0407	1	N	05190
Graphic Design II	GRAPHIC DESG II	50.0409	1	N	11155
Graphic Design II LAB	GRAPHIC DESG II L	50.0409	1	N	11155
Graphic Design III	GRAPHIC DESG III	50.0409	1	N	11155
Graphic Design III LAB	GRAPHIC DESG III L	50.0409	1	N	11155
Graphic Design Advance Studies	GRAPHIC DESG AS	50.0509	1	N	11155
Pattern Drafting	PAT DRAFTING	50.0407	1	N	05164
Photography II	PHOTO II	50.0406	1	N	05167
Photography III	PHOTO III	50.0406	1	N	05167
Photography Advanced Studies	PHOTO AS	50.0406	1	N	05167
Radio Production II	RADIO PROD II	10.0202	1	F	11107
Radio Production III	RADIO PROD III	10.0202	1	F	11107
Theatre Technology II	THEATRE TECH II	50.0502	1	N	05056
Theatre Technology III	THEATRE TECH III	50.0502	1	N	05056
Video Production II	VIDEO PROD II	50.0602	1	F	05168
Video Production II LAB	VIDEO PROD II L	50.0602	1	F	05168
Video Production III	VIDEO PROD III	50.0602	1	F	05168
Video Production III LAB	VIDEO PROD III L	50.0602	1	F	05168

*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.*

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## ***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	<b>Core Course Sequence</b> Principles of Business and Marketing Business Management I <b>Complementary Course(s)</b> Business Management Advanced Studies CTE Work Experience – Business Management and Administration	Business Management
Logistics Management	<b>Core Course Sequence</b> Principles of Office and Logistics Management Logistics Management <b>Complementary Course(s)</b> Logistics Management Advanced Studies CTE Work Experience – Business Management and Administration Industry-Recognized Credential – Logistics Management	Logistics Management
Office Management	<b>Core Course Sequence</b> Principles of Office and Logistics Management Office Management <b>Complementary Course(s)</b> Office Management Advanced Studies CTE Work Experience – Business Management and Administration Industry-Recognized Credential – Logistics Management	Office Management

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

**Remaining Course Sequences for Sunsetting Programs**  
**Business Management and Administration**

Applicable [State Skill Standards](#) are available on website until final program of study core course is completed. For course descriptions, please see the [2021-22](#) or [2022-23](#) 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 Sunsetting Program Sequence	State Skill Standards*
Administrative Services (Sunsetting 2022-23)	<b>Core Course Sequence</b> Office Management II (Last year offered 2023-24) Office Management III (Last year offered 2024-25 as completer)	Administrative Services
Business Management (Sunsetting as 3-year program of study 2022-23)	<b>Core Course Sequence</b> Business Management III (Last year offered 2023-24 as completer)	Business Management
Business Management High School of Business™ (Removed 2023-24)	<b>High School of Business™</b> HSB-Principles of Marketing / HSB-Principles of Finance (Last year offered 2023-24) HSB-Principles of Management / HSB-Business Strategies (Last year offered 2024-25 as completer)	Business Management
Business Management National Academy Foundation™ Academy of Finance (Sunsetting 2023-24)	<b>Core Course Sequence</b> NAF-Financial Services / NAF-Business in a Global Economy (Last year offered 2023-24) NAF-Ethics in Business / NAF-Insurance (Last year offered 2023-24 as completer)	Business 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.

#### **Logistics Management**

*Prerequisite: Principles of Office and Logistics*

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 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 – Logistics Management**

*Prerequisite: Completion of Logistics Management 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 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 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 – Office Management**

*Prerequisite: Completion of Office Management 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 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 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.

**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	12052
Business Management Advanced Studies	BUS MGMT AS	52.0201	1	F	12052
Industry -Recognized Credential – Business Management	IRC BUS MGMT	52.0201	1	F	12999
Logistics Management	LOGISTICS MGMT	52.0203	1	F	12007
Logistics Management Advanced Studies	LOGISTICS MGMT AS	52.0203	1	F	12007
Industry -Recognized Credential – Logistics Management	IRC LOGISTICS MGMT	52.0203	1	F	12999
Office Management	OFFICE MGMT	52.0204	1	N	12003
Office Management Advanced Studies	OFFICE MGMT AS	52.0204	1	N	12003
Industry -Recognized Credential – Office Management	IRC OFFICE MGMT	52.0204	1	N	12999
Principles of Office and Logistics Management	PRNOLM	52.0204	1	N	12003
Principles of Business and Marketing	PRIN BUS MKTG	52.0101	1	F	12051
CTE Work Experience - Business Management and Administration	WORK EXPER BUS ADM	99.0004	1	F	12998

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

### Business Management and Administration

The following courses are from programs that are being, or have been, sunsetted. Please refer to the applicable catalog for course descriptions. Please note: NAF™ finance courses have been moved to the Finance cluster.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Business Management III	BUS MGMT III	52.0201	1	F	12052
HSB-Business Strategies	HSB BUS STRATEGY	52.0299	0.5	F	12052
HSB-Principles of Finance	HSB PRIN FINANCE	52.0801	0.5	N	12052
HSB-Principles of Management	HSB PRIN MGMT	52.0201	0.5	F	12052
HSB-Principles of Marketing	HSB PRIN MKTG	52.1401	0.5	N	12052
NAF-Business in a Global Economy	NAF BUS GLOB ECON	45.0605	0.5	N	12052
NAF-Ethics in Business	NAF ETHICS IN BUS	38.0104	0.5	N	12052
NAF-Financial Services	NAF FINC SERVICES	52.0803	0.5	M	12052
NAF-Insurance	NAF INSURANCE	52.1701	0.5	M	12052
Office Management II	OFFICE MGMT II	52.0204	1	N	12003
Office Management III	OFFICE MGMT III	52.0204	1	N	12003

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.

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## ***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 the principles of Teaching and Training. Areas of study include foundations of education, professional practices, instructional design, educating diverse learners, and designing and managing the learning environment.

### ***Program Course Sequences Education and Training***

Program Name	Course Sequence	State Skill Standards*
Early Childhood Education	<b>Core Course Sequence</b> Early Childhood Education I Early Childhood Education II <b>Complementary Course(s)</b> Early Childhood Education II LAB ** Early Childhood Education Advanced Studies CTE Work Experience – Education and Training	Early Childhood Education
Teaching and Training	<b>Core Course Sequence</b> Teaching and Training I Teaching and Training II <b>Complementary Course(s)</b> Teaching and Training Advanced Studies CTE Work Experience – Education 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.

### ***Remaining Course Sequences for Sunsetting Programs Education and Training***

Applicable [State Skill Standards](#) are available on website until final program of study core course is completed. For course descriptions, please see the [2021-22](#) or [2022-23](#) 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 Sunsetting Program Sequence	State Skill Standards*
Early Childhood Education (Sunsetting 2023-24 as a 3-year program of study)	<b>Core Course Sequence</b> Early Childhood Education II (Last year offered 2023-24 as part of 3-year program of study) Early Childhood Education III (Last year offered 2024-25 as a completer) <b>Complementary Course(s)</b> Early Childhood Education III LAB ** (Last year offered 2024-25)	Early Childhood Education
Teaching and Training (Sunsetting 2022-23 as a 3-year program of study)	<b>Core Course Sequence</b> Teaching and Training III (Last year offered as 2023-24 as a completer)	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 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 – 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 a 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 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 – 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 a 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	19153
Early Childhood Education II	EARLY CHILD II	13.1210	1	M	19153
Early Childhood Education II LAB	EARLY CHILD II L	13.1210	1	M	19153
Early Childhood Education Advanced Studies	EARLY CHILD AS	13.1210	1	M	19153
Industry-Recognized Credential - Early Childhood Education	IRC EARLY CHILD	13.1210	1	M	19199
Teaching and Training I	TEACH TRNG I	13.1206	1	M	19151
Teaching and Training II	TEACH TRNG II	13.1206	1	M	19151
Teaching and Training Advanced Studies	TEACH TRNG AS	13.1206	1	M	19151
Industry-Recognized Credential - Teaching and Training	IRC TEACH TRNG	13.1206	1	M	19199
CTE Work Experience - Education and Training	WORK EXPER EDUC	99.0005	1	M	19198

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 Education and Training

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

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Early Childhood Education II	EARLY CHILD II	13.1210	1	M	19153
Early Childhood Education II LAB	EARLY CHILD II L	13.1210	1	M	19153
Early Childhood Education III	EARLY CHILD III	13.1210	1	M	19153
Early Childhood Education III LAB	EARLY CHILD III L	13.1210	1	M	19153
Teaching and Training III	TEACH TRNG II	13.1206	1	M	19151

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.

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## ***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	<b>Core Course Sequence</b> Accounting and Finance I Accounting and Finance II <b>Complementary Course(s)</b> 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.

***Remaining Course Sequences for Sunsetted Programs***  
***Finance***

There are no applicable sunsetted program of study courses in this Career Cluster.

## 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, 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 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 – 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 a 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	12104
Accounting and Finance II	ACCT FINANCE II	52.0304	1	N	12104
Accounting and Finance Advanced Studies	ACCT FINANCE AS	52.0304	1	N	12104
Industry-Recognized Credential – Accounting and Finance	IRC ACCT FINANCE	52.0304	1	N	12149
CTE Work Experience – Finance	WORK EXPER FINANCE	99.0006	1	N	12148

*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*

### *Finance*

There are no applicable sunsetted program of study courses in this Career Cluster.

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## ***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	<b>Core Course Sequence</b> Military Science I Military Science II Military Science III <b>Complementary Course(s)</b> 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.

***Remaining Course Sequences for Sunsetting Programs  
Government and Public Administration***

There are no applicable sunsetted program of study courses in this Career Cluster.

## 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 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 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 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 – Military 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**  
**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	09002
Military Science II	MIL SCI II	28.0503	1	F	09002
Military Science III	MIL SCI III	28.0503	1	F	09002
Military Science Advanced Studies	MIL SCI AS	28.0503	1	F	09002
CTE Work Experience – Government and Public Safety	WORK EXPER GOV PUB ADMIN	28.0503	1	F	09998

*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**  
**Government and Public Administration**

There are no applicable sunsetted program of study courses in this Career Cluster.

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## ***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	<b>Core Course Sequence</b> Biomedical I Biomedical II Biomedical III <b>Complementary Course(s)</b> Biomedical Advanced Studies CTE Work Experience – Health Science	Biomedical
Community Health Science	<b>Core Course Sequence</b> Principles of Health Science Community Health Science <b>Complementary Course(s)</b> Community Health Science Advanced Studies CTE Work Experience – Health Science	Principles of Health Science <i>and</i> Community Health Science
Dental Science	<b>Core Course Sequence</b> Dental Science I Dental Science II <b>Complementary Course(s)</b> Dental Science Advanced Studies CTE Work Experience – Health Science	Dental Science
Emergency Medical Technician	<b>Core Course Sequence</b> Principles of Health Science Emergency Medical Technician <b>Complementary Course(s)</b> Emergency Medical Technician LAB ** Emergency Medical Technician Advanced Studies CTE Work Experience – Health Science	Principles of Health Science <i>and</i> Emergency Medical Technician
Medical Assisting	<b>Core Course Sequence</b> Principles of Health Science Medical Assisting <b>Complementary Course(s)</b> Medical Assisting LAB ** Medical Assisting Advanced Studies CTE Work Experience – Health Science Industry-Recognized Credential – Medical Assisting	Principles of Health Science <i>and</i> Medical Assisting
Nursing Assistant	<b>Core Course Sequence</b> Principles of Health Science Nursing Assistant <b>Complementary Course(s)</b> Nursing Assistant LAB ** CTE Work Experience – Health Science	Principles of Health Science <i>and</i> Nursing Assistant
Practical Nursing	<b>Core Course Sequence</b> Practical Nursing I Practical Nursing II <b>Complementary Course(s)</b> Practical Nursing II LAB ** Practical Nursing Advanced Studies CTE Work Experience – Health Science	Practical Nursing

Program Name	Course Sequence	State Skill Standards*
Sports Medicine	<b>Core Course Sequence</b> Principles of Health Science Sports Medicine <b>Complementary Course(s)</b> Sports Medicine Advanced Studies CTE Work Experience – Health Science	Principles of Health Science <i>and</i> 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 the [2021-22](#) or [2022-23](#) 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*
Dental Science (Sunsetted 2023-24 as a 3-year program of study)	<b>Core Course Sequence</b> Dental Science II (Last year offered 2023-24 as part of 3-year sequence) Dental Science III (Last year offered 2024-25 as a 3-year program of study completer)	Dental Science
Emergency Medical Technician (Sunsetted 2023-24 as a 3-year program of study)	<b>Core Course Sequence</b> Health Science II or Emergency Medical Services (Last year offered 2023-24 as part of 3-year sequence) Emergency Medical Technician (Last year offered as a completer 2024-25 in 3-year sequence)	Health Science I and II <i>and</i> Emergency Medical Technician
Health Information Management (Sunsetted 2023-24)	<b>Core Course Sequence</b> Health Information Management I (Last year offered 2023-24) Health Information Management II (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Health Information Management Advanced Studies (Last year offered 2025-26)	Health Information Management
Medical Assisting (Sunsetted 2023-24 as a 3-year program of study)	<b>Core Course Sequence</b> Health Science II or Medical Terminology (Last year offered 2023-24 as part of 3-year sequence) Medical Assisting (Last year offered 2024-25 as a 3-year program of study completer)	Health Science I and II <i>and</i> Medical Assisting
Nursing Assistant (Sunsetted 2022-23 as a 3-year program of study)	<b>Core Course Sequence</b> Nursing Assistant (Last year offered 2023-24 as a 3-year program of study completer) <b>Complementary Course(s)</b> Nursing Assistant Lab (Last year offered 2023-24 as part of a 3-year program)	Nursing Assistant
Pharmacy Practice (Sunsetted 2023-24)	<b>Core Course Sequence</b> Health Science II or Medical Terminology (Last year offered 2023-24) Pharmacy Practice (Last year offered 2024-25 as a completer) <b>Complementary Course(s)</b> Pharmacy Practice Advanced Studies (Last year offered 2025-26)	Health Science I and II <i>and</i> Pharmacy Practice
Respiratory Science (Sunsetted 2023-24)	<b>Core Course Sequence</b> Respiratory Science II (Last year offered 2023-24) Respiratory Science III (Last year offered 2024-25 as a completer) <b>Complementary Course(s)</b> Respiratory Science Advanced Studies (Last year offered 2025-26)	Respiratory Science
Sports Medicine (Sunsetted 2022-23 as a 3-year program of study)	<b>Core Course Sequence</b> Sports Medicine II (Last year offered 2023-24 as a 3-year program of study completer) <b>Complementary Course(s)</b> Respiratory Science Advanced Studies (Last year offered 2025-26)	Sports Medicine

\* 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 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.

#### 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 skill 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 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.

**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 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.

**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 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.

**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 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 – Medical Assisting**

*Prerequisite: Completion of Medical Assisting 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 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.

**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 field 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 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.

**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.

**Sports Medicine**

*Prerequisite: Principles of Health Science*

This course is designed to introduce students to the field of sports medicine. It will provide students 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.

**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	14255
Biomedical II	BIOMED II	26.0102	1	N	14255
Biomedical III	BIOMED III	26.0102	1	N	14255
Biomedical Advanced Studies	BIOMED AS	26.0102	1	N	14255
Community Health Science	CMTY HLTH SCI	51.2208	1	N	08053
Community Health Science Advanced Studies	CMTY HLTH SCI AS	51.2208	1	N	08053
Dental Science I	DENTAL SCI I	51.0601	1	M	14054
Dental Science II	DENTAL SCI II	51.0601	1	M	14054
Dental Assisting Advanced Studies	DENTAL SCI AS	51.0601	1	M	14054
Emergency Medical Technician	EMER MED TECH	51.0904	1	N	14055
Emergency Medical Technician LAB	EMER MED TECH L	51.0904	1	N	14055
Emergency Medical Technician Advanced Studies	EMER MED TECH AS	51.0904	1	N	14055
Medical Assisting	MEDICAL ASST	51.0801	1	M	14151
Medical Assisting LAB	MEDICAL ASST L	51.0801	1	M	14151
Medical Assisting Advanced Studies	MEDICAL ASST AS	51.0801	1	M	14151
Industry-Recognized Credential – Medical Assisting	IRC MEDICAL ASST	51.0801	1	M	14999
Nursing Assistant	NURSING ASST	51.3902	1	M	14051
Nursing Assistant LAB	NURSING ASST L	51.3902	1	M	14051
Practical Nursing I	PRAC NURS I	51.3901	1	M	14052
Practical Nursing II	PRAC NURS II	51.3901	1	M	14052
Practical Nursing II LAB	PRAC NURS II L	51.3901	1	M	14052
Practical Nursing Advanced Studies	PRAC NURS AS	51.3901	1	M	14052
Sports Medicine	SPORTS MED	51.0913	1	N	14062
Sports Medicine Advanced Studies	SPORTS MED AS	51.0913	1	N	14062
Principles of Health Science	PRN HEALTH SCI	51.0000	1	N	14002
CTE Work Experience - Health Science	WORK EXPER HEALTH	99.0008	1	N	14298

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, sunsetting. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Community Health Science	CMTY HLTH SCI	51.2208	1	N	08053
Dental Science II	DENTAL SCI II	51.0601	1	M	14054
Dental Science III	DENTAL SCI III	51.0601	1	M	14054
Emergency Medical Services	EMER MED SERVICES	51.0810	1	N	14055
Emergency Medical Technician	EMER MED TECH	51.0904	1	N	14055
Emergency Medical Technician LAB	EMER MED TECH L	51.0904	1	N	14055
Health Information Management I	HLTH INFO MGMT I	51.0707	1	M	14157
Health Information Management II	HLTH INFO MGMT II	51.0707	1	M	14157
Health Information Management Advanced Studies	HLTH INFO MGMT AS	51.0707	1	M	14157
Health Science II	HEALTH SCI II	51.0000	1	N	14251
Medical Assisting	MEDICAL ASST	51.0801	1	M	14151
Medical Assisting LAB	MEDICAL ASST L	51.0801	1	M	14151
Medical Terminology	MEDICAL TERM	51.0899	1	N	14154
Nursing Assistant	NURSING ASST	51.3902	1	M	14051
Nursing Assistant Lab	NURSING ASST L	51.3902	1	M	14051
Pharmacy Practice	PHARMACY PRACT	51.0805	1	M	14152
Pharmacy Practice Advanced Studies	PHARMACY PRACT AS	51.0805	1	M	14152
Respiratory Science II	RESP SCI II	51.0908	1	N	14061
Respiratory Science III	RESP SCI III	51.0908	1	N	14061
Respiratory Science Advanced Studies	RESP SCI AS	51.0908	1	N	14061
Sports Medicine	SPORTS MED II	21.0913	1	N	14062

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.

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## ***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	<b>Core Course Sequence</b> Culinary Arts I Culinary Arts II <b>Complementary Course(s)</b> Culinary Arts II LAB ** Culinary Arts Advanced Studies CTE Work Experience – Hospitality and Tourism Industry-Recognized Credential – Culinary Arts	Culinary Arts
Hospitality and Tourism	<b>Core Course Sequence</b> Hospitality and Tourism I Hospitality and Tourism II <b>Complementary Course(s)</b> 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.

## ***Remaining Course Sequences for Sunsetting Programs***

### ***Hospitality and Tourism***

Applicable [State Skill Standards](#) are available on website until final program of study core course is completed. For course descriptions, please see the [2021-22](#) or [2022-23](#) Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

<b>Program Name</b>	<b>Remaining Course(s) from Sunsetting Program Sequence</b>	<b>State Skill Standards*</b>
Baking and Pastry (Sunsetting 2023-24)	<b>Core Course Sequence</b> Baking and Pastry I (Last year offered 2023-24) Baking and Pastry II (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Baking and Pastry I LAB ** (Last year offered 2023-24) Baking and Pastry II LAB ** (Last year offered 2024-25) Baking and Pastry Advanced Studies (Last year offered 2025-26)	Baking and Pastry
Culinary Arts (Sunsetting 2023-24 as a 3-year program)	<b>Core Course Sequence</b> Culinary Arts II (Last year offered 2023-24 as part of 3-year program) Culinary Arts III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Culinary Arts II LAB ** Culinary Arts III LAB ** (Last year offered 2024-25)	Culinary Arts
Hospitality and Tourism (Sunsetting 2023-24 as a 3-year program)	<b>Core Course Sequence</b> Hospitality and Tourism II (Last year offered 2023-24 as part of 3-year program) Hospitality and Tourism III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Hospitality and Tourism II LAB ** Hospitality and Tourism III LAB ** (Last year offered 2024-25)	Hospitality and Tourism
National Academy Foundation Academy of Hospitality and Tourism (Sunsetting 2023-24)	<b>Core Course Sequence</b> NAF-Geography for Tourism / NAF-Sustainable Tourism (Last year offered 2023-24) NAF-Hospitality Marketing / NAF-Sports, Entertainment and Event Planning (Last year offered 2024-25 as completer courses)	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 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 – Culinary Arts

*Prerequisite: Completion of Culinary Arts 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 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 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 – 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 a 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	16053
Culinary Arts II	CUL ARTS II	12.0503	1	F	16053
Culinary Arts II LAB	CUL ARTS II L	12.0503	1	F	16053
Culinary Arts Advanced Studies	CUL ARTS AS	12.0503	1	F	16053
Industry-Recognized Credential – Culinary Arts	IRC CUL ARTS	12.0503	1	F	16999
Hospitality and Tourism I	HOSPLTY TOUR I	52.0901	1	N	16001
Hospitality and Tourism II	HOSPLTY TOUR II	52.0901	1	N	16001
Hospitality and Tourism II LAB	HOSPLTY TOUR II L	52.0901	1	N	16001
Hospitality and Tourism Advanced Studies	HOSPLTY TOUR AS	52.0901	1	N	16001
Industry-Recognized Credential – Hospitality and Tourism	IRC HOSPLTY TOUR	59.0901	1	N	16999
CTE Work Experience - Hospitality and Tourism	WORK EXPER HOSP	99.0009	1	N	16198

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 Hospitality and Tourism

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
Baking and Pastry I	BAKING I	12.0501	1	F	16056
Baking and Pastry I LAB	BAKING I L	12.0501	1	F	16056
Baking and Pastry II	BAKING II	12.0501	1	F	16056
Baking and Pastry II LAB	BAKING II L	12.0501	1	F	16056
Baking and Pastry Advanced Studies	BAKING AS	12.0501	1	F	16056
Culinary Arts II	CUL ARTS II	12.0503	1	F	16053
Culinary Arts II LAB	CUL ARTS II L	12.0503	1	F	16053
Culinary Arts III	CUL ARTS III	12.0503	1	F	16053
Culinary Arts III LAB	CUL ARTS III L	12.0503	1	F	16053
Hospitality and Tourism II	HOSPLTY TOUR II	52.0901	1	N	16001
Hospitality and Tourism II LAB	HOSPLTY TOUR II L	52.0901	1	N	16001
Hospitality and Tourism III	HOSPLTY TOUR III	52.0901	1	N	16001
Hospitality and Tourism III LAB	HOSPLTY TOUR III L	52.0901	1	N	16001
NAF-Geography for Tourism	NAF GEO TOURISM	52.1906	0.5	N	16001
NAF-Hospitality Marketing	NAF HOSPLTY MKTG	52.1910	0.5	N	16001
NAF-Sports, Entertainment and Event Planning	NAF EVENT PLANNING	52.0907	0.5	M	16001
NAF-Sustainable Tourism	NAF SUSTAIN TOUR	52.1999	0.5	N	16001

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.

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## ***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	<b>Core Course Sequence</b> Principles of Cosmetology Cosmetology I Cosmetology II <b>Complementary Course(s)</b> CTE Work Experience – Human Services Industry-Recognized Credential – Cosmetology	Cosmetology
Family and Consumer Sciences	<b>Core Course Sequence</b> Family and Consumer Sciences I Family and Consumer Sciences II <b>Complementary Course(s)</b> Family and Consumer Sciences Advanced Studies CTE Work Experience – Human Services Industry-Recognized Credential – Family and Consumer Sciences	Family and Consumer Sciences
Human and Social Services	<b>Core Course Sequence</b> Human and Social Services I Human and Social Services II <b>Complementary Course(s)</b> Human and Social Services Advanced Studies 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.

## ***Remaining Course Sequences for Sunsetting 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 the [2021-22](#) or [2022-23](#) Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

<b>Program Name</b>	<b>Remaining Course(s) from Sunsetting Program Sequence</b>	<b>State Skill Standards*</b>
Family and Consumer Sciences (Sunsetting 2023-24 as a 4-year program of study)	<b>Core Course Sequence</b> Family and Consumer Sciences (Last year offered 2023-24 as completer for 4-year program of study) <i>Due to the sunsetting of Fashion, Textiles, and Design I, Foods and Nutrition I, and Human Development I (last year offered 2022-23), the new sequence above should be followed for any students who had only completed one or two of the required courses.</i>	Family and Consumer Sciences
Foods and Nutrition (Sunsetting 2023-24)	<b>Core Course Sequence</b> Foods and Nutrition II (Last year offered 2023-24) Foods and Nutrition III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Foods and Nutrition Advanced Studies (Last year offered 2025-26)	Foods and Nutrition
Human Development (Sunsetting 2023-24)	<b>Core Course Sequence</b> Human Development II (Last year offered 2023-24) Human Development III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> 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 a 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.

#### 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 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 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 – 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 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 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 – 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 a 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.

## 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.

**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	19101
Cosmetology II	COSMO II	12.0401	6	M	19101
Industry-Recognized Credential – Cosmetology	IRC COMSO	12.0401	1	M	19999
Family and Consumer Sciences I	FAMILY CS I	19.0101	1	N	19251
Family and Consumer Sciences II	FAMILY CS II	19.0101	1	N	19251
Family and Consumer Sciences Advanced Studies	FAMILY CS AS	19.0101	1	N	19251
Industry-Recognized Credential – Family and Consumer Sciences	IRC FAMILY CS	19.0101	1	N	19999
Human and Social Services I	HSS I	13.1101	1	M	19301
Human and Social Services II	HSS II	13.1101	1	M	19301
Human and Social Services Advanced Studies	HSS AS	13.1101	1	M	19301
Industry-Recognized Credential – Human and Social Services	IRC HSS	13.1101	1	M	19999
Principles of Cosmetology	PRIN COSMO	12.0401	1	M	19101
CTE Work Experience – Human Services	WORK EXPER HU SERV	99.0010	1	M	19998

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, sunsetting. Please refer to the applicable catalog for course descriptions.

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Family and Consumer Sciences	FACS	19.0101	1	N	19251
Foods and Nutrition II	FOODS II	19.0501	1	M	19252
Foods and Nutrition III	FOODS III	19.0501	1	M	19252
Foods and Nutrition Advanced Studies	FOODS AS	19.0501	1	M	19252
Human Development II	HUMAN DEVELOP II	19.0701	1	M	19261
Human Development III	HUMAN DEVELOP III	19.0701	1	M	19261
Human Development Advanced Studies	HUMAN DEVELOP AS	19.0701	1	M	19261

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.

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## ***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	<p><b>Core Course Sequence</b> Advanced Computer Science I Advanced Computer Science II or AP Computer Science A</p> <p><b>Complementary Course(s)</b> Advanced Computer Science II LAB ** Advanced Computer Science Advanced Studies CTE Work Experience – Information Technology Industry-Recognized Credential – Advanced Computer Science</p>	Advanced Computer Science
Cybersecurity	<p><b>Core Course Sequence</b> Cybersecurity I Cybersecurity II</p> <p><b>Complementary Course(s)</b> Cybersecurity Advanced Studies CTE Work Experience – Information Technology Industry-Recognized Credential –Cybersecurity</p>	Cybersecurity
Digital Game Development	<p><b>Core Course Sequence</b> Digital Game Development I Digital Game Development II</p> <p><b>Complementary Course(s)</b> Digital Game Development II LAB ** Digital Game Development Advanced Studies CTE Work Experience – Information Technology</p>	Digital Game Development
Information Technology Networking	<p><b>Core Course Sequence</b> CISCO IT Essentials/Intro to Cybersecurity CISCO-CCNA I Introduction to Networking CISCO-CCNA II Routing and Switching Essentials</p> <p><b>Complementary Course(s)</b> IT Networking Advanced Studies CTE Work Experience – Information Technology</p>	Information Technology Networking
Web Design and Development	<p><b>Core Course Sequence</b> Web Design and Development I Web Design and Development II</p> <p><b>Complementary Course(s)</b> Web Design and Development II LAB ** Web Design and Development Advanced Studies CTE Work Experience – Information Technology Industry-Recognized Credential –Web Design and Development</p>	Web Design and Development

\* 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 Sunsetting 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 [2021-22](#) or [2022-23](#) 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 Sunsetting Program Sequence	State Skill Standards*
Animation (Sunsetting 2023-24)	<b>Core Course Sequence</b> Animation II (Last year offered 2023-24) Animation III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Animation II LAB ** (Last year offered 2023-24) Animation III LAB ** (Last year offered 2024-25) Animation Advanced Studies (Last year offered 2025-26)	Animation
Computer Science (Sunsetting 2023-24)	<b>Core Course Sequence</b> Computer Science II (Last year offered 2023-24) Computer Science III or AP Computer Science A (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Computer Science II LAB ** (Last year offered 2023-24) Computer Science III LAB ** (Last year offered 2024-25)	Computer Science
Cybersecurity (Sunsetting 2023-24 as a 3-year program of study)	<b>Core Course Sequence</b> Cybersecurity II (Last year offered 2023-24 as part of 3-year program) Cybersecurity III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Cybersecurity II LAB ** (Last year offered 2023-24 as part of 3-year program) Cybersecurity III LAB ** (Last year offered 2024-25)	Cybersecurity
Digital Game Development (Sunsetting 2022-23 as a 3-year program of study)	<b>Core Course Sequence</b> Digital Game Development II (Last year offered 2023-24 as part of 3-year program) Digital Game Development III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Digital Game Development II LAB ** (Last year offered 2023-24 as part of 3-year program) Digital Game Development III LAB ** (Last year offered 2024-25)	Digital Game Development
Web Design and Development	<b>Core Course Sequence</b> Web Design and Development II (Last year offered 2023-24 as part of 3-year program) Web Design and Development III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Web Design and Development II LAB ** (Last year offered 2023-24 as part of 3-year program) Web Design and Development III LAB ** (Last year offered 2024-25)	Web Design and Development

\* 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: 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 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 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 – 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.

**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.

**CISCO-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.

**CISCO-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 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.

**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 advance 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 Advanced Studies**

*Prerequisite: Completion of Cybersecurity 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 – Cybersecurity**

*Prerequisite: Completion of Cybersecurity 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 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 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.

**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 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 – 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 a 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	10152
Advanced Computer Science II	ADV COMPUTER SCIENCE II	11.0701	1	F	10152
Advanced Computer Science II LAB	ADV COMPUTER SCIENCE II L	11.0701	1	F	10152
AP Computer Science A	AP COMPUTER SCI A	11.0701	1	F	10157
Advanced Computer Science Advanced Studies	ADV COMPUTER SCIENCE AS	11.0701	1	F	10152
Industry-Recognized Credential – Advanced Computer Science	IRC ADV COMPUTER SCI	11.0701	1	F	10999
Cybersecurity I	CYBRSECU I	11.1001	1	F	10020
Cybersecurity II	CYBRSECU II	11.1001	1	F	10020
Cybersecurity Advanced Studies	CYBRSECU AS	11.1001	1	F	10020
Industry-Recognized Credential – Cybersecurity	IRC CYBRSECU	11.1001	1	F	10999
Digital Game Development I	DIG GAME DEV I	50.0411	1	N	10205
Digital Game Development II	DIG GAME DEV II	50.0411	1	N	10205
Digital Game Development II LAB	DIG GAME DEV II L	50.0411	1	N	10205
Digital Game Development Advanced Studies	DIG GAME DEV AS	50.0411	1	N	10205
Cisco IT Essentials	CISCO IT ESST	11.1002	.5	F	10102
Cisco Introduction to Cybersecurity	CISCO IT CYBR	11.1002	.5	F	10102
CCNA I Introduction to Networking	CISCO CCNA I	11.1002	1	F	10102
CCNA II Routing and Switching Essentials	CISCO CCNA II	11.1002	1	F	10102
IT Networking Advanced Studies	IT NETWORKNG AS	11.1002	1	F	10102
Web Design and Development I	WEB DESG DEV I	11.0801	1	N	10201
Web Design and Development II	WEB DESG DEV II	11.0801	1	N	10201
Web Design and Development II LAB	WEB DESG DEV II L	11.0801	1	N	10201
Web Design and Development Advanced Studies	WEB DESG DEV AS	11.0801	1	N	10201
Industry-Recognized Credential – Web Design and Development	IRC WEB DESG DEV	11.0801	1	N	10999
CTE Work Experience – Information Technology	WORK EXPER IT	99.0011	1	F	10298

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 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 II	ANIMATE II	10.0304	1	N	05177
Animation II LAB	ANIMATE II L	10.0304	1	N	05177
Animation III	ANIMATE III	10.0304	1	N	05177
Animation III LAB	ANIMATE III L	10.0304	1	N	05177
Animation Advanced Studies	ANIMATE AS	10.0304	1	N	05177
Computer Science II	COMPUTER SCI II	11.0701	1	F	10011
Computer Science II LAB	COMPUTER SCI II L	11.0701	1	F	10011
Computer Science III	COMPUTER SCI III	11.0701	1	F	10011
Computer Science III LAB	COMPUTER SCI III L	11.0701	1	F	10011
Computer Science Advanced Studies	COMPUTER SCI AS	11.0701	1	F	10011
Cybersecurity II	CYBRSECU II	11.1001	1	F	10108
Cybersecurity III	CYBRSECU III	11.1001	1	F	10108
Digital Game Development II	DIG GAME DEV II	50.0411	1	N	10205
Digital Game Development II LAB	DIG GAME DEV II L	50.0411	1	N	10205
Digital Game Development III	DIG GAME DEV III	50.0411	1	N	10205
Digital Game Development III LAB	DIG GAME DEV III L	50.0411	1	N	10205
IT Networking Advanced Studies	IT NETWKNG AS	11.1002	1	F	10102
Web Design and Development II	WEB DESG DEV II	11.0801	1	N	10201
Web Design and Development II LAB	WEB DESG DEV II L	11.0801	1	N	10201
Web Design and Development III	WEB DESG DEV III	11.0801	1	N	10201
Web Design and Development III LAB	WEB DESG DEV III L	11.0801	1	N	10201

*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.*

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## ***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	<b>Core Course Sequence</b> Emergency Telecommunications I Emergency Telecommunications II <b>Complementary Course(s)</b> Emergency Telecommunications II Lab ** Emergency Telecommunications Advanced Studies CTE Work Experience – Law, Public Safety, Corrections, and Security	Emergency Telecommunications
Fire Science	<b>Core Course Sequence</b> Fire Science I Fire Science II <b>Complementary Course(s)</b> Fire Science Advanced Studies CTE Work Experience – Law, Public Safety, Corrections, and Security	Fire Science
Forensic Science	<b>Core Course Sequence</b> Forensic Science I Forensic Science II <b>Complementary Course(s)</b> Forensic Science Advanced Studies CTE Work Experience – Law, Public Safety, Corrections, and Security	Forensic Science
Law Enforcement	<b>Core Course Sequence</b> Law Enforcement I Law Enforcement II <b>Complementary Course(s)</b> Law Enforcement Advanced Studies CTE Work Experience – Law, Public Safety, Corrections, and Security	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.

## ***Remaining Course Sequences for Sunsetting Programs***

### ***Law, Public Safety, Corrections, and Security***

Applicable [State Skill Standards](#) are available on website until final program of study core course is completed. For course descriptions, please see the [2021-22](#) or [2022-23](#) Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

<b>Program Name</b>	<b>Remaining Course(s) from Sunsetting Program Sequence</b>	<b>State Skill Standards*</b>
Criminal Justice (Sunsetting 2023-24 as a 3-year program of study)	<b>Core Course Sequence</b> Criminal Justice II (Last year offered 2023-24 as part of 3-year program of study) Criminal Justice III (Last year offered 2024-25 as completer)	Criminal Justice
Forensic Science (Sunsetting 2022-23 as a 3-year program of study)	<b>Core Course Sequence</b> Forensic Science III (Last year offered 2023-24 as completer)	Forensic Science
Law Enforcement (Sunsetting 2023-24 as a 3-year program of study)	<b>Core Course Sequence</b> Law Enforcement II (Last year offered 2023-24 as part of 3-year program of study) Law Enforcement III (Last year offered 2024-25 as completer)	Law Enforcement

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

## **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 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.

#### **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 field 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 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.

## 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 for 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 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.

## 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 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.

**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	15104
Emergency Telecommunications II	EMER TELECOMM II	43.0399	1	F	15104
Emergency Telecommunications LAB	EMER TELLECOM II L	43.0399	1	F	15104
Emergency Telecommunications Advanced Studies	EMER TELECOMM AS	43.0399	1	F	15104
Fire Science I	FIRE SCI I	43.0203	1	F	15151
Fire Science II	FIRE SCI II	43.0203	1	F	15151
Fire Science Advanced Studies	FIRE SCI AS	43.0203	1	F	15151
Forensic Science I	FORENSIC SCI I	43.0406	1	N	15055
Forensic Science II	FORENSIC SCI II	43.0406	1	N	15055
Forensic Science Advanced Studies	FORENSIC SCI AS	43.0406	1	N	15055
Law Enforcement I	LAW ENFORCE I	43.0107	1	F	15054
Law Enforcement II	LAW ENFORCE II	43.0107	1	F	15054
Law Enforcement Advanced Studies	LAW ENFORCE AS	43.0107	1	F	15054
CTE Work Experience – Law Public Safety Corrections and Security	WORK EXPER LAW	99.0012	1	F	15998

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

### Law, Public Safety, Corrections, and Security

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
Criminal Justice II	CRIMINAL JUST II	43.0104	1	F	15051
Criminal Justice III	CRIMINAL JUST III	43.0104	1	F	15051
Criminal Justice Advanced Studies	CRIMINAL JUST AS	43.0104	1	F	15051
Forensic Science III	FORENSIC SCI II	43.0406	1	N	15055
Law Enforcement II	LAW ENFORCE II	43.0107	1	F	15054
Law Enforcement III	LAW ENFORCE III	43.0107	1	F	15054
CTE Work Experience – Law Public Safety Corrections and Security	WORK EXPER LAW	99.0012	1	F	15998

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.

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## ***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	<b>Core Course Sequence</b> Advanced Manufacturing Technologies I Advanced Manufacturing Technologies II <b>Complementary Course(s)</b> Advanced Manufacturing Technologies II Lab** Advanced Manufacturing Technologies Advanced Studies CTE Work Experience – Manufacturing Industry-Recognized Credential – Advanced Manufacturing Technologies	Advanced Manufacturing Technologies
Electronic Technology	<b>Core Course Sequence</b> Electronic Technology I Electronic Technology II <b>Complementary Course(s)</b> Electronic Technology II LAB ** Electronic Technology Advanced Studies CTE Work Experience – Manufacturing	Electronic Technology
Industrial Maintenance	<b>Core Course Sequence</b> Industrial Maintenance I Industrial Maintenance II <b>Complementary Course(s)</b> Industrial Maintenance II LAB ** Industrial Maintenance Advanced Studies CTE Work Experience – Manufacturing Industry-Recognized Credential – Industrial Maintenance	Industrial Maintenance
Metalworking	<b>Core Course Sequence</b> Metalworking I Metalworking II Metalworking III <b>Complementary Course(s)</b> Metalworking Advanced Studies CTE Work Experience – Manufacturing	Metalworking
Welding Technology	<b>Core Course Sequence</b> Welding Technology I Welding Technology II <b>Complementary Course(s)</b> Welding Technology II LAB ** Welding Technology Advanced Studies CTE Work Experience – Manufacturing Industry-Recognized Credential – Industrial Maintenance	Welding 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.

## **Remaining Course Sequences for Sunsetting 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 [2021-22](#) or [2022-23](#) Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

<b>Program Name</b>	<b>Remaining Course(s) from Sunsetting Program Sequence</b>	<b>State Skill Standards*</b>
Automation Technology (Sunsetting 2023-24)	<b>Core Course Sequence</b> Automation Technology II (Last year offered 2023-24) Automation Technology III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Automation Technology Advanced Studies (Last year offered 2025-26)	Automation Technology
Electronic Technology (Sunsetting 2023-24 as 3-year program of study)	<b>Core Course Sequence</b> Electronic Technology II (Last year offered 2023-24 as part of 3-year program of study) Electronic Technology III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Electronic Technology II LAB ** (Last year offered 2023-24 as part of 3-year program of study) Electronic Technology III LAB ** (Last year offered 2024-25)	Electronic Technology
Manufacturing Technologies (Sunsetting 2023-24)	<b>Core Course Sequence</b> Manufacturing Technologies II (Last year offered 2023-24) Manufacturing Technologies III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Manufacturing Technologies II LAB ** (Last year offered 2023-24) Manufacturing Technologies III LAB ** (Last year offered 2024-25) Manufacturing Technologies Advanced Studies (Last year offered 2025-26)	Manufacturing Technologies
Mechanical Technology (Sunsetting 2023-24)	<b>Core Course Sequence</b> Mechanical Technology II (Last year offered 2023-24) Mechanical Technology III (Last year offered 2024-25 as completer) <b>Complementary Course(s)</b> Mechanical Technology II LAB ** (Last year offered 2023-24) Mechanical Technology III LAB ** (Last year offered 2024-25) Mechanical Technology Advanced Studies (Last year offered 2025-26)	Mechanical Technology
Welding Technology (Sunsetting 2022-23 as a 3-year program of study)	<b>Core Course Sequence</b> Welding Technology III (Last year offered 2023-24 as completer) <b>Complementary Course(s)</b> Welding Technology III LAB ** (Last year offered 2023-24)	Welding Technology

## 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 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 – 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 a 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 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.

## 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 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 – Industrial Maintenance**

*Prerequisite: Completion Industrial Maintenance 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 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 III**

*Prerequisite: Metalworking II*

This course is a continuation of Metalworking II. This course is designed to review the basic elements and processes of metalworking. Students will further develop skills by learning complex metal machining procedures, metallurgy, and industrial production methods and controls. 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.

**Metalworking Advanced Studies**

*Prerequisite: Completion of Metalworking 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.

**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 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 – Welding

*Prerequisite: Completion Welding Technology 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 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	13104
Advanced Manufacturing Technologies II	AMT II	15.0613	1	F	13104
Advanced Manufacturing Technologies II LAB	AMT II L	15.0613	1	F	13104
Advanced Manufacturing Technologies Advanced Studies	AMT AS	15.0613	1	F	13104
Industry-Recognized Credential – Advanced Manufacturing	IRC AMT	15.0613	1	F	13999
Electronic Technology I	ELEC TECH I	15.1701	1	F	17101
Electronic Technology II	ELEC TECH II	15.1701	1	F	17101
Electronic Technology II LAB	ELEC TECH II L	15.1701	1	F	17101
Electronic Technology Advanced Studies	ELEC TECH AS	15.1701	1	F	17101
Industrial Maintenance I	IND MAINT I	47.0303	1	F	13303
Industrial Maintenance II	IND MAINT II	47.0303	1	F	13303
Industrial Maintenance II Lab	IND MAINT II L	47.0303	1	F	13303
Industrial Maintenance Advanced Studies	IND MAINT AS	47.0303	1	F	13303
Industry-Recognized Credential – Industrial Maintenance.	IRC IND MAINT	47.0303	1	F	13999
Metalworking I	METALWRKG I	48.0511	1	F	13202
Metalworking II	METALWRKG II	48.0511	1	F	13202
Metalworking III	METALWRKG III	48.0511	1	F	13202
Metalworking Advanced Studies	METALWRKG AS	48.0511	1	F	13202
Welding Technology I	WELDING TECH I	48.0508	1	F	13207
Welding Technology II	WELDING TECH II	48.0508	1	F	13207
Welding Technology II LAB	WELDING TECH II L	48.0508	1	F	13207
Welding Technology Advanced Studies	WELDING TECH AS	48.0508	1	F	13207
Industry-Recognized Credential – Welding Technology	IRC WELDING	48.0508	1	F	13999
CTE Work Experience - Manufacturing	WORK EXPER MANUF	99.0013	1	F	13098

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

### 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 II	AUTOMATION II	14.4201	1	F	21010
Automation Technology III	AUTOMATION III	14.4201	1	F	21010
Automation Technology Advanced Studies	AUTOMATION AS	14.4201	1	F	21010
Electronic Technology II	ELEC TECH II	15.1701	1	F	17101
Electronic Technology II LAB	ELEC TECH II L	15.1701	1	F	17101
Electronic Technology III	ELEC TECH III	15.1701	1	F	17101
Electronic Technology III LAB	ELEC TECH III L	15.1701	1	F	17101
Manufacturing Technologies II	MANUF TECH II	15.0613	1	F	13002
Manufacturing Technologies II LAB	MANUF TECH II L	15.0613	1	F	13002
Manufacturing Technologies III	MANUF TECH III	15.0613	1	F	13002
Manufacturing Technologies III LAB	MANUF TECH III L	15.0613	1	F	13002
Manufacturing Technologies Advanced Studies	MANUF TECH AS	15.0613	1	F	13002
Mechanical Technology II	MECH TECH II	47.0303	1	F	13102
Mechanical Technology II LAB	MECH TECH II L	47.0303	1	F	13102
Mechanical Technology III	MECH TECH III	47.0303	1	F	13102
Mechanical Technology III LAB	MECH TECH III L	47.0303	1	F	13102
Mechanical Technology Advanced Studies	MECH TECH AS	47.0303	1	F	13102
Welding Technology II	WELDING TECH II	48.0508	1	F	13207
Welding Technology II LAB	WELDING TECH II L	48.0508	1	F	13207
Welding Technology III	WELDING TECH III	48.0508	1	F	13207
Welding Technology III LAB	WELDING TECH III L	48.0508	1	F	13207

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.

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## ***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	<b>Core Course Sequence</b> Principles of Business and Marketing Marketing I <b>Complementary Course(s)</b> Marketing Advanced Studies CTE Work Experience – Marketing	Marketing

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

***Remaining Course Sequences for Sunsetting Programs  
Marketing***

Applicable [State Skill Standards](#) are available on website until final program of study core course is completed. For course descriptions, please see the [2021-22](#) or [2022-23](#) 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 Sunsetting Program Sequence	State Skill Standards*
Marketing (Sunsetting 2022-23 as 3- year program of study)	<b>Core Course Sequence</b> Marketing III (Last year offered 2023-24 as completer course)	Marketing

## Course Descriptions

### Marketing

#### 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 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.

#### 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.

#### 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	12152
Marketing Advanced Studies	MKTG AS	52.1401	1	N	12152
Principles of Business and Marketing	PRIN BUS MKTG	52.0101	1	F	12051
CTE Work Experience – Marketing	WORK EXPER MARKET	99.0014	1	N	12198

*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 Marketing

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

COURSE TITLE	ABBREVIATED NAME	CIP CODE	CREDITS	NON-TRAD	SCED CODE
Marketing III	MKTG III	52.1401	1	N	12152

*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.*

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## ***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	<b>Core Course Sequence</b> Energy Technologies I Energy Technologies II <b>Complementary Course(s)</b> Energy Technologies Advanced Studies CTE Work Experience – Science, Technology, Engineering, and Mathematics	Energy Technologies
Engineering Foundations	<b>Core Course Sequence</b> Engineering Foundations I Engineering Foundations II <b>Complementary Course(s)</b> Engineering Foundations Advanced Studies CTE Work Experience – Science, Technology, Engineering, and Mathematics Industry-Recognized Credential – Engineering Foundations	Engineering Foundations

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

## ***Remaining Course Sequences for Sunsetting 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 [2021-22](#) or [2022-23](#) Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

<b>Program Name</b>	<b>Remaining Course(s) from Sunsetting Program Sequence</b>	<b>State Skill Standards*</b>
Aerospace Engineering (sunsetting 2023-24)	<b>Core Course Sequence</b> Principles of Engineering (Last year 2023-24 as part of 3-year program of study) Aerospace Engineering (Last year 2024-25 as completer) <b>Complementary Course(s)</b> Engineering Design and Development (Last year 2025-26)	Aerospace Engineering
Architectural and Civil Engineering (sunsetting 2023-24)	<b>Core Course Sequence</b> Principles of Engineering (Last year 2023-24 as part of 3-year program of study) Civil Engineering and Architecture (Last year 2024-25 as completer) <b>Complementary Course(s)</b> Engineering Design and Development (Last year 2025-26)	Architectural and Civil Engineering
Electrical Engineering (sunsetting 2023-24)	<b>Core Course Sequence</b> Principles of Engineering (Last year 2023-24 as part of 3-year program of study) Digital Electronics (Last year 2024-25 as completer) <b>Complementary Course(s)</b> Engineering Design and Development (Last year 2025-26)	Electrical Engineering
Energy Technologies (sunsetting 2022-23 as 3-year program of study)	<b>Core Course Sequence</b> Energy Technologies III (Last year 2023-24 as completer)	Energy Technologies
Environmental Engineering (sunsetting 2023-24)	<b>Core Course Sequence</b> Principles of Engineering (Last year 2023-24 as part of 3-year program of study) Environmental Sustainability (Last year 2024-25 as completer) <b>Complementary Course(s)</b> Engineering Design and Development (Last year 2025-26)	Environmental Engineering
Mechanical Engineering (sunsetting 2023-24)	<b>Core Course Sequence</b> Principles of Engineering (Last year 2023-24 as part of 3-year program of study) Computer Integrated Manufacturing (Last year 2024-25 as completer) <b>Complementary Course(s)</b> Engineering Design and Development (Last year 2025-26)	Mechanical Engineering

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

## **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 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 – Energy Technologies**

*Prerequisite: Completion of Energy Technologies 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 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 Advanced Studies**

*Prerequisite: Completion of Engineering Foundations 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 – Engineering Foundations**

*Prerequisite: Completion of Engineering Foundations 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 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 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	03012
Energy Technologies II	ENERGY TECH II	15.1701	1	F	03012
Energy Technologies Advanced Studies	ENERGY TECH AS	15.1701	1	F	03012
Industry-Recognized Credential – Energy Technologies	IRC ENERGY TECH	15.1701	1	F	21999
Engineering Foundations I	ENG FOUND I	14.0101	1	F	21005
Engineering Foundations II	ENG FOUND II	14.0101	1	F	21005
Engineering Foundations Advanced Studies	ENG FOUND AS	14.0101	1	F	21005
Industry-Recognized Credential – Engineering Foundations	IRC ENG FOUND	14.0101	1	F	21999
CTE Work Experience – Science Technology Engineering Mathematics	WORK EXPER STEM	99.0015	1	F	21998

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**

#### **Science, Technology, Engineering, and Mathematics**

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
Aerospace Engineering	AEROSPACE ENG	14.0201	1	F	21019
Civil Engineering and Architecture	CIVIL ENG	14.0401	1	F	21021
Computer Integrated Manufacturing	COMP INT MFG	14.1901	1	F	21022
Digital Electronics	DIG ELEC	15.0303	1	F	21023
Energy Technologies III	ENERGY TECH III	15.0503	1	F	03012
Engineering Design and Development	ENG DESG DEV	14.0101	1	F	21025
Environmental Sustainability	ENVIRON SUS	14.0501	1	F	21024
Principles of Engineering	PRIN ENG	14.0101	1	F	21018

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.

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## ***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	<b>Core Course Sequence</b> Automotive Technology I Automotive Technology II <b>Complementary Course(s)</b> Automotive Technology II LAB ** Intermediate Automotive Technology Automotive Technology Advanced Studies CTE Work Experience – Transportation, Distribution, and Logistics Industry-Recognized Credential – Automotive Technology	Automotive Technology
Aviation Maintenance Technician	<b>Core Course Sequence</b> Aviation Maintenance Technician I Aviation Maintenance Technician II <b>Complementary Course(s)</b> Aviation Maintenance Technician Advanced Studies CTE Work Experience – Transportation, Distribution, and Logistics Industry-Recognized Credential – Aviation Maintenance Technician	Aviation Maintenance Technician
Aviation Technology	<b>Core Course Sequence</b> Aviation Technology I Aviation Technology II <b>Complementary Course(s)</b> Aviation Technology Advanced Studies CTE Work Experience – Transportation, Distribution, and Logistics Industry-Recognized Credential – Aviation Technology	Aviation Technology
Diesel Technology	<b>Core Course Sequence</b> Diesel Technology I Diesel Technology II <b>Complementary Course(s)</b> Diesel Technology II LAB ** Diesel Technology Advanced Studies CTE Work Experience – Transportation, Distribution, and Logistics Industry-Recognized Credential – Diesel Technology	Diesel 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.

## ***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 [2021-22](#) or [2022-23](#) Course Catalog, available on website, based on the year prior to the course sunset date shown in the following table.

<b>Program Name</b>	<b>Remaining Course(s) from Sunsetted Program Sequence</b>	<b>State Skill Standards*</b>
Automotive Service Technician (Sunsetted 2023-24)	<b>Core Course Sequence</b> Automotive Service Technician II (Last year offered 2023-24) Automotive Service Technician III (Last year offered 2024-25) Automotive Service Technician IV (Last year offered 2025-26 as completer) <b>Complementary Course(s)</b> Automotive Service Technician II LAB ** (Last year offered 2023-24) Automotive Service Technician III LAB ** (Last year offered 2024-25) Automotive Service Technician IV LAB ** (Last year offered 2025-26)	Automotive Service Technician
Aviation Maintenance Technician (Sunsetted 2023-24 as a 3-year program of study)	<b>Core Course Sequence</b> Aviation Maintenance Technician II (Last year offered 2023-24 as part of 3-year program) Aviation Maintenance Technician III (Last year offered 2024-25 as completer)	Aviation Maintenance Technician
Aviation Technology (Sunsetted 2023-24 as a 3-year program of study)	<b>Core Course Sequence</b> Aviation Technology II (Last year offered 2023-24 as part of 3-year program) Aviation Technology III (Last year offered 2024-25 as completer)	Aviation Technology
Diesel Technology (Sunsetted 2023-24 as a 3-year program of study)	<b>Core Course Sequence</b> Diesel Technology II (Last year offered 2023-24 as part of 3-year program) Diesel Technology III (Last year offered 2024-25 as 3-year program completer)	Diesel 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.

## **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 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.

#### **Intermediate Automotive Technology**

*Prerequisite: Completion of Automotive Technology Program of Study*

This course is a continuation of Automotive Technology II. 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 a 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 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 – 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 a 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 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 – Aviation Technology**

*Prerequisite: Completion of Aviation Technology 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 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 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 – Diesel Technology**

*Prerequisite: Completion of Diesel Technology 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 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	20104
Automotive Technology II	AUTO TECH II	47.0600	1	F	20104
Automotive Technology II LAB	AUTO TECH II L	47.0600	1	F	20104
Automotive Technology Advanced Studies	AUTO TECH AS	47.0600	1	F	20104
Intermediate Automotive Technology	INT AUTO TECH	47.0600	1	F	20104
Industry-Recognized Credential – Automotive Technology	IRC AUTO TECH	47.0600	1	F	20999
Aviation Maintenance Technician I	AVI MAINT TECH I	47.0608	1	F	20113
Aviation Maintenance Technician II	AVI MAINT TECH II	47.0608	1	F	20113
Aviation Maintenance Technician Advanced Studies	AVI MAINT TECH AS	47.0608	1	F	20113
Industry-Recognized Credential – Aviation Maintenance Technician	AVI MAINT TECH	47.0608	1	F	20999
Aviation Technology I	AVIATION TECH I	49.0101	1	F	20053
Aviation Technology II	AVIATION TECH II	49.0101	1	F	20053
Aviation Technology Advanced Studies	AVIATION TECH AS	49.0101	1	F	20053
Industry-Recognized Credential – Aviation Technology	AVIATION TECH	49.0101	1	F	20999
Diesel Technology I	DIESEL TECH I	47.0605	1	F	20107
Diesel Technology II	DIESEL TECH II	47.0605	1	F	20107
Diesel Technology II LAB	DIESEL TECH II L	47.0605	1	F	20107
Diesel Technology Advanced Studies	DIESEL TECH AS	47.0605	1	F	20107
Industry-Recognized Credential – Diesel Technology	DIESEL TECH	47.0605	1	F	20999
CTE Work Experience - Transportation Distribution and Logistics	WORK EXPER TRANS	99.0016	1	F	20998

*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 II	AUTO SERV II	47.0604	1	F	20106
Automotive Service Technician II LAB	AUTO SERV II L	47.0604	1	F	20106
Automotive Service Technician III	AUTO SERV III	47.0604	1	F	20106
Automotive Service Technician III LAB	AUTO SERV III L	47.0604	1	F	20106
Automotive Service Technician IV	AUTO SERV IV	47.0604	1	F	20106
Automotive Service Technician IV LAB	AUTO SERV IV L	47.0604	1	F	20106
Aviation Maintenance Technician II	AVI MAINT TECH II	47.0608	1	F	20113
Aviation Maintenance Technician III	AVI MAINT TECH II	47.0608	1	F	20113
Aviation Technology II	AVIATION TECH II	49.0101	1	F	20053
Aviation Technology III	AVIATION TECH III	49.0101	1	F	20053
Diesel Technology II	DIESEL TECH II	47.0605	1	F	20107
Diesel Technology II LAB	DIESEL TECH II L	47.0605	1	F	20107
Diesel Technology III	DIESEL TECH III	47.0605	1	F	20107
Diesel Technology III LAB	DIESEL TECH III L	47.0605	1	F	20107

*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, Foods, 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 Development***

### **Teening to Adulthood**

*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 ( <i>middle school</i> )	AG VENTUR	01.0000	0.5	N	18001
Building Engineers I ( <i>middle school</i> )	BUILDING ENG 1	15.0000	0.5	F	21052
Building Engineers II ( <i>middle school</i> )	BUILDING ENG 2	15.0000	0.5	F	21052
Business Innovators ( <i>middle school</i> )	BUSINES INNOV	52.0101	0.5	F	12001
Digital Designers ( <i>middle school</i> )	DIGITAL DESI	09.0102	0.5	N	11001
Everyday Heroes ( <i>middle school</i> )	EVER HEROES	51.0000	0.5	N	14001
Teening to Adulthood ( <i>middle school</i> )	TEEN ADULT	19.1001	0.5	N	19001

*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.*