NEVADA
CAREER & TECHNICAL EDUCATION
COURSE CATALOG
2018-2019

This document was prepared by:

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

www.doe.nv.gov

Presented to the State Board of Education /
State Board for Career and Technical Education on
January 18, 2018

The Nevada Department of Education does not discriminate on the basis of race, color, religion, national origin, sex, disability, sexual orientation, gender identity or expression, or age in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups.

For inquiries, contact the Equity Coordinator at (775) 687-9200.

NEVADA STATE BOARD OF EDUCATION
NEVADA STATE BOARD FOR CAREER AND TECHNICAL EDUCATION

Elaine Wynn ..... President
Mark Newburn ..... Vice President
Robert Blakely ..... Member
Beth Brown-Swanberg ..... Member
David Carter ..... Member
Tonia Holmes-Sutton ..... Member
Dave Jensen ..... Member
Sam Lieberman ..... Member
Dawn Miller ..... Member
Felicia Ortiz ..... Member
Hunter Drost ..... Student Representative

NEVADA DEPARTMENT OF EDUCATION

Steve Canavero, Ph.D.
Superintendent of Public Instruction

Kristine Nelson, Director
Office of Career Readiness, Adult Learning & Education Options

VISION

All Nevadans ready for success in the 21st century

MISSION

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

Nevada Department of Education
Nevada Ready!

TABLE OF CONTENTS

Introduction 1

Program Area Course Sequences, Course Descriptions, and Course Data Information:

Agriculture & Natural Resources AG-1
- Agriculture, Food & Natural Resources

Business & Marketing Education BUS-1
- Business, Management & Administration
- Finance
- Marketing, Sales & Service

Education, Hospitality & Human Services EHH-1
- Education & Training
- Hospitality & Tourism
- Human Services

Health Science & Public Safety HSPS-1
- Government & Public Administration
- Health Science
- Law, Public Safety, Corrections & Security

Information & Media Technologies IMT-1
- Arts, A/V Technology & Communications
- Information Technology

Skilled & Technical Sciences STS-1
- Architecture & Construction
- Manufacturing
- Science, Technology, Engineering, & Mathematics
- Transportation, Distribution & Logistics

INTRODUCTION

PURPOSE

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

- The CTE course and course sequence teaches 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 fields. 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 includes 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 challenge to meet state and/or industry-standards.

CATALOG ORGANIZATION

Courses are organized into the following program areas: (1) Agriculture and Natural Resources; (2) Business and Marketing Education; (3) Health Sciences and Public Safety; (4) Hospitality, Human Services and Education; (5) Information and Media Technologies; and (6) Skilled and Technical Sciences. Courses within each program area are further aligned to their appropriate career cluster. Each program area section includes the following elements: (1) Program Course Sequences; (2) Course Descriptions; and (3) Course Data Information.

PROGRAM COURSE SEQUENCES

The course sequencing provided in this 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 state standards in each program.

The sequencing tables are divided into their appropriate career clusters. Within each career cluster, 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 sequential order required for the complete delivery of the state standards for that program. An example for Environmental Management is shown below.

Program Name	Course Sequence	State Skill Standards
Environmental Management	**Core Course Sequence** Environmental Management I Environmental Management II Environmental Management III **Complementary Course(s)** Environmental Management Advanced Studies	Environmental Management

The **Complementary courses** are those courses that directly support additional time and instruction of the state standards, or must align to the student's program of study. Complementary courses are considered additional courses and do not count towards a student's progression to a "Completer" status and 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 in the following table.

Sequencing Allowances for Complementary Courses
Complementary courses may be added to a student's program of study if all of the following are met: • enrollment in a complementary course does not impede the completion of the core course sequence • 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 • prerequisites of the course must be followed

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. (The 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. Technical assessments 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 following elements: (1) Course Title; (2) Abbreviated Name; (3) Credits; (4) Course Level; (5) Classification of Instructional Program Code (CIP Code); (6) Prerequisites; and (7) Course Description.

A **course description** is provided for each course. The descriptions are fairly general and are intended to be used by school districts and schools for their annual catalogs, registration materials, etc. The description may be enhanced or modified as desired at the local level. The **course titles**, **abbreviated names**, **levels**, and **CIP codes** are to be used locally exactly as written in this catalog. An example for a Business Management course is shown below.

Business Management I

Abbreviated Name: ***BUS MGMT I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***52.0201***

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.

CTE is largely defined by courses that meet the description above and are one (1) **credit** in length. Exceptions to one credit courses are permitted for national program curriculum designs, such as those required by the National Academy Foundation, High Schools of Business, and others.

COURSE DATA INFORMATION

The **course titles**, **abbreviated names**, **levels**, and **CIP codes** are to be used locally exactly as written in this catalog. This is especially important since it is those titles, abbreviations, levels, and CIP codes that will populate the System for Accountability Information in Nevada (SAIN). Through accurate use of the titles, abbreviated names, levels, and CIP codes, the CTE data reporting will be equally consistent and accurate. Furthermore, the data system will not accept course names, abbreviations, levels, and CIP codes that are inconsistent with those in this catalog.

The **course level** determines the order in which courses will be taught. In a designated sequence, for example, a level 2 course (L2) is taught after the level 1 course (L1) in the same sequence. The CTE program should follow the sequence in order for the student to complete all state standards and be prepared for the end-of-program technical assessment. The end-of-program technical assessment will be administered in the completion course (L2C, L3C, or L4C) for those programs for which assessments have been developed. The following table describes each level.

Level	Description
L1	Introductory level 1 course
L2	Intermediate level 2 course
L2L	Intermediate level 2 course lab * (concurrent enrollment in L2 or L2C required)
L2C	Completion level 2 course per state standards (CTE assessments given)
L3	Advanced level 3 course
L3L	Advanced level 3 course lab * (concurrent enrollment in L3 or L3C required)
L3C	Completion level 3 course per state standards (CTE assessments given)
L4C	Completion level 4 course per state standards (CTE assessments given)
L4L	Completion level 4 course lab * (concurrent enrollment in L4C required)
AS	Advanced Studies level course ** (above and beyond the state standards)
WK	Work Experience ***

* 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.

** Advanced Studies courses allow students to continue taking courses beyond the completion level courses and are repeatable.

*** Work Experience courses must follow NAC 389.562, 389.564, and 389.566 regulations.

CATALOG UPDATES AND REVISIONS

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

This Page was Intentionally Left Blank.

AGRICULTURE
&
NATURAL RESOURCES

CAREER CLUSTERS & PROGRAM ALIGNMENT

- AGRICULTURE, FOOD & NATURAL RESOURCES -

- Agricultural Business Systems
- Agricultural Leadership, Communication & Policy
- Agricultural Mechanics Technology
- Animal Science
- Biotechnology
- Environmental Management
- Floriculture Design & Management
- Food Science Technology
- Landscape Design & Management
- Natural Resources & Wildlife Management
- Ornamental Horticulture/Greenhouse Management
- Veterinary Science

AGRICULTURE & NATURAL RESOURCES

PROGRAM COURSE SEQUENCES

- AGRICULTURE, FOOD & NATURAL RESOURCES -

Program Name	Course Sequence	State Skill Standards*
Agricultural Business Systems	**Core Course Sequence** Agriculture Science I Agriculture Science II Agriculture Business **Complementary Course(s)** Agriculture Business Advanced Studies	Agriculture Science - & - Agricultural Business Systems
Agricultural Leadership, Communication and Policy	**Core Course Sequence** Agriculture Science I Agriculture Science II Agriculture Leadership Communication and Policy **Complementary Course(s)** Agriculture LCP Advanced Studies	Agriculture Science - & - Agricultural Leadership, Communication and Policy
Agricultural Mechanics Technology	**Core Course Sequence** Agricultural Mechanics Technology I Agricultural Mechanics Technology II Agricultural Mechanics Technology III **Complementary Course(s)** Agricultural Mechanics Technology Advanced Studies	Agricultural Mechanics Technology
Animal Science	**Core Course Sequence** Agriculture Science I Agriculture Science II Animal Science **Complementary Course(s)** Animal Science Advanced Studies	Agriculture Science - & - Animal Science
Biotechnology	**Core Course Sequence** Agriculture Science I Agriculture Science II Biotechnology **Complementary Course(s)** Biotechnology Advanced Studies	Agriculture Science - & - Biotechnology *TBD*
Environmental Management	**Core Course Sequence** Environmental Management I Environmental Management II Environmental Management III **Complementary Course(s)** Environmental Management Advanced Studies	Environmental Management

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

- AGRICULTURE, FOOD & NATURAL RESOURCES -
(CONTINUED)

Program Name	Course Sequence	State Skill Standards*
Floriculture Design and Management	**Core Course Sequence** Agriculture Science I - *or* - Horticulture Science Plant Science and Ornamental Horticulture Floriculture **Complementary Course(s)** Floriculture Advanced Studies	Agriculture Science - *or* - Horticulture Science - & - Ornamental Horticulture/Greenhouse Management - & - Floriculture Design and Management
Food Science Technology	**Core Course Sequence** Agriculture Science I Agriculture Science II Food Science Technology **Complementary Course(s)** Food Science Technology Advanced Studies	Agriculture Science - & - Food Science Technology
Landscape Design and Management	**Core Course Sequence** Agriculture Science I - *or* - Horticulture Science Landscaping I Landscaping II **Complementary Course(s)** Landscaping Advanced Studies	Agriculture Science - *or* - Horticulture Science - & - Landscape Design and Management
Natural Resources and Wildlife Management	**Core Course Sequence** Agriculture Science I Agriculture Science II Natural Resources and Wildlife Management **Complementary Course(s)** Natural Resources and Wildlife Management Advanced Studies	Agriculture Science - & - Natural Resources and Wildlife Management
Ornamental Horticulture/Greenhouse Management	**Core Course Sequence** Agriculture Science I - *or* - Horticulture Science Plant Science and Ornamental Horticulture Greenhouse Management **Complementary Course(s)** Greenhouse Management Advanced Studies	Agriculture Science - *or* - Horticulture Science - & - Ornamental Horticulture/Greenhouse Management
Veterinary Science	**Core Course Sequence** Agriculture Science I Agriculture Science II Veterinary Science **Complementary Course(s)** Veterinary Science Advanced Studies	Agriculture Science - & - Veterinary Science

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

COURSE DESCRIPTIONS

- Agriculture, Food & Natural Resources -

Agriculture Business

Abbreviated Name: ***AG BUSINESS*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***01.0102***

Prerequisite: Agriculture Science II

This course is a continuation of Agriculture Science II. This course provides advanced agriculture students with the information and skills necessary for success in agribusiness and in operating entrepreneurial ventures in the agricultural industry. These courses may cover topics such as economic principles, business planning and human resources, risk management, financial concepts, marketing, and sales strategies. Other possible topics include developing a business plan, employee/employer relations, problem-solving and decision making, commodities, and building leadership skills. These courses may also incorporate a survey of the careers within the agricultural industry. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. 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.

Agriculture Business Advanced Studies

Abbreviated Name: ***AG BUSINESS AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***01.0102***

Prerequisite: Agriculture Business

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Agriculture Leadership Communication and Policy

Abbreviated Name: ***AG LEADERSHIP*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***01.0899***

Prerequisite: Agriculture Science II

This course is a continuation of Agriculture Science II. This program provides advanced agriculture students with instruction on leadership and communication skills with a focus on opportunities in the agriculture industries. Topics will include personal leadership development, group leadership skills, research methodology, verbal and written communications, journalism, agriculture public policy and human relations. Other topics may include problem solving and decision making and teamwork skills. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. 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.

Agriculture LCP Advanced Studies

Abbreviated Name: ***AG LEADERSHIP AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***01.0899***

Prerequisite: Agriculture Leadership, Communication and Policy

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

Agricultural Mechanics Technology I

Abbreviated Name: ***AG MECH TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***01.0205***

Prerequisite: None

This course will introduce students into the foundation 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 Mechanics Technology II

Abbreviated Name: ***AG MECH TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***01.0205***

Prerequisite: Agricultural Mechanics Technology I

This course is a continuation of Agriculture Mechanics Technology I. It allows intermediate agriculture students to expand on skills and knowledge from Agriculture Mechanical Engineering 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. 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.

Agricultural Mechanics Technology III

Abbreviated Name: ***AG MECH TECH III*** *Credits:* ***1*** *Level:* ***L3*** *CIP Code:* ***01.0205***

Prerequisite: Agricultural Mechanics Technology II

This course is a continuation of Agricultural Mechanics Technology II. This course provides advanced agriculture students with instructions in advanced techniques and processes such as electrical controls and maintenance; basic construction and pipe fitting techniques; welding: GMAW, 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 Mechanics Technology Advanced Studies

Abbreviated Name: ***AG MECH TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***01.0205***

Prerequisite: Agricultural Mechanics Technology III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Agriculture Science I

Abbreviated Name: ***AG SCIENCE I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***01.0000***

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 Agriculture Experience Programs.

Agriculture Science II

Abbreviated Name: ***AG SCIENCE II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***01.0000***

Prerequisite: Agriculture Science I

This course is a continuation of Agriculture Science I. This course allows intermediate students to expand on skills and knowledge from Agriculture Science I. Areas of study include scientific investigations in agriculture, plant and soil sciences, agriculture sales and marketing, ornamental horticulture, animal sciences and natural resource management. 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.

Animal Science

Abbreviated Name: ***ANIMAL SCI*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***01.0901***

Prerequisite: Agriculture Science II

This course is a continuation of Agriculture Science II. This course allows advanced students to expand on skills and knowledge from Agriculture Science II while exploring the livestock and red meat industry. This course covers the basic anatomy and physiology of domestic animals, genetics, reproduction, animal health and welfare, evaluation and selection of animals, land stewardship and marketing. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. The appropriate use of technology and industry-standard equipment is an integral part of this course. 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

Abbreviated Name: ***ANIMAL SCI AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***01.0901***

Prerequisite: Animal Science

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Biotechnology

Abbreviated Name: ***BIO TECH*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***26.1201***

Prerequisite: Agriculture Science II

This course is a continuation of Agriculture Science II. This course allows advanced students to expand on skills and knowledge from Agriculture Science II. Areas of study will include a focus on animal and plant science applications, biochemistry, principles of genetic transfer and genetically modified organisms, bio-manufacturing, applications to the food industry, and trends in agricultural biotechnology research. 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.

Biotechnology Advanced Studies

Abbreviated Name: ***BIO TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***26.1201***

Prerequisite: Animal Science

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Environmental Management I

Abbreviated Name: ***ENVIRON MGMT I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***03.0101***

Prerequisite: None

This course is an introduction to environmental management. Areas of study include ecological concepts and scientific principles related to environmental science, scientific investigation, soils, sustainable use including composting, recycling and hydroponics, and environmental issues. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

Environmental Management II

Abbreviated Name: ***ENVIRON MGMT II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***03.0101***

Prerequisite: Environmental Management I

This course is a continuation of Environmental Management I. This course will provide intermediate students with instruction in advanced techniques and processes. The students will continue to develop all skills learned in Environmental Management I. Areas of study include population ecology, air and water quality, soils, mineral extraction, environmental site management, conventional and renewable energy resources, and career exploration. 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.

Environmental Management III

Abbreviated Name: ***ENVIRON MGMT III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***03.0101***

Prerequisite: Environmental Management II

This course is a continuation of Environmental Management II. This course will provide advanced students with instruction in environmental site management, law and public policy, GPS and GIS, and hydrology and hydrogeology. The students will continue to develop all skills learned in Environmental Management I and II. 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.

Environmental Management Advanced Studies

Abbreviated Name: ***ENVIRON MGMT AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***03.0101***

Prerequisite: Environmental Management III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Floriculture

Abbreviated Name: ***FLORAL*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***01.0608***

Prerequisite: Plant Science and Ornamental Horticulture

This course is a continuation of Ornamental Horticulture. This course is the study of the science, business and design principles of floriculture. Areas of study include the history of floral design, the use of color, tools and principles of design in floral arrangements, plant identification, care and processing of cut flowers, marketing and sales, record keeping and floral business management. 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.

Floriculture Advanced Studies

Abbreviated Name: ***FLORAL AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***01.0608***

Prerequisite: Floriculture

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Food Science Technology

Abbreviated Name: ***FOOD SCI TECH*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***01.1002***

Prerequisite: Agriculture Science II

This course is a continuation of Agriculture Science II. This course allows advanced students to expand on skills and knowledge from Agriculture Science II while exploring the basic laws of chemistry, microbiology, and physics applied to the production, processing, preservation, and packaging of food. Experimentation will allow students to see how scientific principles are involved in food preparation, handling, and storage. Students will have the opportunity to apply basic math and technical writing skills to solve real-world problems and work with the operation and maintenance of related food handling and processing equipment and facilities. 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.

Food Science Technology Advanced Studies

Abbreviated Name: ***FOOD SCI TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***01.1002***

Prerequisite: Food Science Technology

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Greenhouse Management

Abbreviated Name: ***GREENHOUSE MGMT*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***01.0604***

Prerequisite: Plant Science and Ornamental Horticulture

This course is a continuation of Ornamental Horticulture. This course provides advanced agriculture students a technical understanding and working knowledge of the greenhouse industry. Topics include safety, plant physiology, growing media, plant nutrition, integrated pest management, propagation, growing greenhouse crops and greenhouse business concepts. Students will gain knowledge and skills related to the care and management of gardens and greenhouses. 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.

Greenhouse Management Advanced Studies

Abbreviated Name: ***GREENHOUSE MGMT AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***01.0604***

Prerequisite: Greenhouse Management

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Horticulture Science

Abbreviated Name: ***HORTICULTURE SCI*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***01.1103***

Prerequisite: None

This course is an introductory course into the horticulture industry. Areas of study include scientific investigations in horticulture, basic plant processes and anatomy, soils, plant propagation, plant growth requirements, cultivation practices, business management, horticulture and environment, and leadership and career skills. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

Landscaping I

Abbreviated Name: ***LANDSCAPE I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***01.0605***

Prerequisite: Agriculture Science I or Horticulture Science

This course is a continuation of Ag Science I or Horticulture Science I. This course is designed to provide students with instruction in many aspects of the landscape industry, including safety, plant identification, analyzing the landscape site, designing the landscape, selecting plants for the design, hardscaping, turf installation and management, pruning, and integrated pest management. The use of technology is an integral part of this course. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Landscaping II

Abbreviated Name: ***LANDSCAPE II*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***01.0605***

Prerequisite: Landscaping I

This course is a continuation of Landscaping I. This course is designed to provide students with advanced instruction in landscaping including: applying the principles and elements of design, selecting plant materials, hardscaping, irrigation, installation techniques and integrated pest management. The use of technology is an integral part of this course. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. 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.

Landscaping Advanced Studies

Abbreviated Name: ***LANDSCAPE AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***01.0605***

Prerequisite: Landscaping II

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Natural Resources and Wildlife Management

Abbreviated Name: ***NAT RES MGMT*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***03.0601***

Prerequisite: Agriculture Science II

This course is a continuation of Agriculture Science II. This course introduces advanced agriculture students to concepts of natural resource science and management. This will include ecological concepts and scientific principles, rangeland management, fire ecology, GPS and GIS, fish and wild ecology, forestry, renewable and nonrenewable resources, and fish and wildlife management. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. 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.

Natural Resources and Wildlife Management Advanced Studies

Abbreviated Name: ***NAT RES MGMT AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***03.0601***

Prerequisite: Natural Resources and Wildlife Management

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Plant Science and Ornamental Horticulture

Abbreviated Name: ***PLANT SCI HORT*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***01.0603***

Prerequisite: Agriculture Science I or Horticulture Science

This course is a continuation of Agriculture Science I or Horticulture Science. 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. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Veterinary Science

Abbreviated Name: ***VETERINARY SCI*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***01.0903***

Prerequisite: Agriculture Science II

This course is a continuation of Agriculture Science II. This course is designed to introduce advanced agriculture students to the technical understanding and working knowledge of the veterinary medicine industry. Topics to be covered include safety and sanitation, veterinary medical terminology, disease prevention and control, basic laboratory techniques, office and clinical procedures, medical math, legal practices in a veterinary clinical setting, ethical and animal welfare issues, and clinical examinations. 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.

Veterinary Science Advanced Studies

Abbreviated Name: ***VETERINARY SCI AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***01.0903***

Prerequisite: Veterinary Science

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Agriculture Food and Natural Resources

Abbreviated Name: ***WORK EXPER AFNR*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0001***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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 & Natural Resources -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Agricultural Business	AG BUSINESS	L3C	01.0102	1	F
Agricultural Business Advanced Studies	AG BUSINESS AS	AS	01.0102	1	F
Agricultural Leadership Communication and Policy	AG LEADERSHIP	L3C	01.0899	1	N
Agricultural LCP Advanced Studies	AG LEADERSHIP AS	AS	01.0899	1	N
Agricultural Mechanics Technology I	AG MECH TECH I	L1	01.0205	1	F
Agricultural Mechanics Technology II	AG MECH TECH II	L2	01.0205	1	F
Agricultural Mechanics Technology III	AG MECH TECH III	L3C	01.0205	1	F
Agricultural Mechanics Technology Advanced Studies	AG MECH TECH AS	AS	01.0205	1	F
Agriculture Science I	AG SCIENCE I	L1	01.0000	1	F
Agriculture Science II	AG SCIENCE II	L2	01.0000	1	F
Animal Science	ANIMAL SCI	L3C	01.0901	1	F
Animal Science Advanced Studies	ANIMAL SCI AS	AS	01.0901	1	F
Biotechnology	BIO TECH	L3C	26.1201	1	F
Biotechnology Advanced Studies	BIO TECH AS	AS	26.1201	1	F
Environmental Management I	ENVIRON MGMT I	L1	03.0101	1	F
Environmental Management II	ENVIRON MGMT II	L2	03.0101	1	F
Environmental Management III	ENVIRON MGMT III	L3C	03.0101	1	F
Environmental Management Advanced Studies	ENVIRON MGMT AS	AS	03.0101	1	F
Floriculture	FLORAL	L3C	01.0608	1	N
Floriculture Advanced Studies	FLORAL AS	AS	01.0608	1	N
Food Science Technology	FOOD SCI TECH	L3C	01.1002	1	F
Food Science Technology Advanced Studies	FOOD SCI TECH AS	AS	01.1002	1	F
Greenhouse Management	GREENHOUSE MGMT	L3C	01.0604	1	F
Greenhouse Management Advanced Studies	GREENHOUSE MGMT AS	AS	01.0604	1	F
Horticulture Science	HORTICULTURE SCI	L1	01.1103	1	F
Landscaping I	LANDSCAPE I	L2	01.0605	1	F
Landscaping II	LANDSCAPE II	L3C	01.0605	1	F
Landscaping Advanced Studies	LANDSCAPE AS	AS	01.0605	1	F
Natural Resources and Wildlife Management	NAT RES MGMT	L3C	03.0601	1	F
Natural Resources and Wildlife Management Advanced Studies	NAT RES MGMT AS	AS	03.0601	1	F
Plant Science and Ornamental Horticulture	PLANT SCI HORT	L2	01.0603	1	F
Veterinary Science	VETERINARY SCI	L3C	01.0903	1	F
Veterinary Science Advanced Studies	VETERINARY SCI AS	AS	01.0903	1	F
Work Experience - Agriculture Food and Natural Resources	WORK EXPER AFNR	WK	99.0001	1	F

BUSINESS
&
MARKETING EDUCATION

CAREER CLUSTERS & PROGRAM ALIGNMENT

- BUSINESS, MANAGEMENT & ADMINISTRATION -

- Administrative Services
- Business Management

- FINANCE -

- Accounting & Finance

- MARKETING, SALES & SERVICE -

- Entrepreneurship
- Marketing
- Sports and Entertainment Marketing

BUSINESS & MARKETING EDUCATION

PROGRAM COURSE SEQUENCES

- BUSINESS, MANAGEMENT & ADMINISTRATION -

Program Name	Course Sequence	State Skill Standards*
Administrative Services	**Core Course Sequence** Business Software Applications Office Management I Office Management II **Complementary Course(s)** Office Management Advanced Studies	Administrative Services
Business Management	**Core Course Sequence** Principles of Business and Marketing ◊ Business Management I Business Management II **Complementary Course(s)** Business Management Advanced Studies	Business Management
High School of Business ™	**High School of Business ™** HSB-Principles of Business / HSB-Business Economics HSB-Principles of Marketing / HSB-Principles of Finance HSB-Principles of Management / HSB-Business Strategies **Complementary Course(s)** HSB-Leadership HSB-Wealth Management	Business Management

* The Employability Skills for Career Readiness Standards must be an integrated component of all CTE course sequences.
◊ Course description listed in the Marketing, Sales & Service section

- FINANCE -

Program Name	Course Sequence	State Skill Standards*
Accounting and Finance	**Core Course Sequence** Accounting and Finance I Accounting and Finance II Accounting and Finance III **Complementary Course(s)** Accounting and Finance Advanced Studies	Accounting and Finance
National Academy Foundation Academy of Finance	**Core Course Sequence** NAF-Principles of Finance / NAF-Business Economics NAF-Financial Services / NAF-Business in a Global Economy NAF-Ethics in Business / NAF-Insurance **Complementary Course(s)** NAF-Principles of Accounting NAF-Entrepreneurship NAF-Managerial Accounting NAF-Applied Finance NAF-Financial Planning	Business Management

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

- *MARKETING, SALES & SERVICE* -

Program Name	Course Sequence	State Skill Standards*
Entrepreneurship	**Core Course Sequence** Principles of Business and Marketing Entrepreneurship I Entrepreneurship II **Complementary Course(s)** Entrepreneurship Advanced Studies	Entrepreneurship
Marketing	**Core Course Sequence** Principles of Business and Marketing Marketing I Marketing II **Complementary Course(s)** Marketing Advanced Studies	Marketing
Sports and Entertainment Marketing	**Core Course Sequence** Principles of Business and Marketing Sports and Entertainment Marketing I Sports and Entertainment Marketing II **Complementary Course(s)** Sports and Entertainment Marketing Advanced Studies	Sports and Entertainment Marketing

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

COURSE DESCRIPTIONS

- BUSINESS, MANAGEMENT & ADMINISTRATION -

Business Management I

Abbreviated Name: ***BUS MGMT I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***52.0201***

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 II

Abbreviated Name: ***BUS MGMT II*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***52.0201***

Prerequisite: Business Management I

This course is a continuation of the Business Management program and focuses predominantly on financial analysis that supports economic decision-making in business. It includes specialist- and management-level skills such as interpreting financial statements; calculating financial ratios; developing budgets; forecasting sales; and much more. 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.

Business Management Advanced Studies

Abbreviated Name: ***BUS MGMT AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***52.0201***

Prerequisite: Business Management II

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

Business Software Applications

Abbreviated Name: ***BUS SOFT APPS*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***52.0407***

Prerequisite: None

This course is for entry-level students in Administrative Services. This program prepares students for jobs in an office or business setting in the area of administrative support and office management. This course emphasizes skills in standard industry software. Students will gain proficiency of advanced web functions, word-processing applications, spreadsheet applications, presentation applications and database applications as they are used in a business environment. Student will understand and abide by policies for technology.

HSB-Business Economics

Abbreviated Name: ***HSB BUS ECONOMICS*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***52.0601***

Prerequisite: HSB-Principles of Business

Schools must be affiliated with the High Schools of Business™ program to offer this course

In Business Economics, a project-based business course, students expand their understanding that businesses are influenced by external factors that are often beyond their control. Consumer spending, government policies, economic conditions, legal issues, and global competition are addressed through practical, current applications to everyday societal and business life. Decision matrices are introduced, and the importance and costs of quality are stressed. Students develop their knowledge and skills in such areas as economics, entrepreneurship, operations, and professional development. Throughout the course, students will be presented with current economic problems for which they are asked to determine solutions, often through the application of decision matrices

HSB-Business Strategies

Abbreviated Name: ***HSB BUS STRATEGY*** *Credits:* ***.5*** *Level:* ***L3C*** *CIP Code:* ***52.0299***

Prerequisite: HSB-Principles of Management

Schools must be affiliated with the High Schools of Business™ program to offer this course

Business Strategies serves as the capstone course for the High School of Business™ program. Students employ their decision matrices to finalize marketing, financial, and management plans developed previously, incorporating them into a business plan for a non-profit organization. The non-profit venture is actualized during the course, requiring students to engage in risk assessment, strategic planning, and performance assessment.

HSB-Leadership

Abbreviated Name: ***HSB LEADERSHIP*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***52.0213***

Prerequisite: None

Schools must be affiliated with the High Schools of Business™ program to offer this course

Leadership, a project-based leadership course, develops student understanding and skills in such areas as communication skills, emotional intelligence, operations, and professional development. Students acquire an understanding and appreciation of the need for leadership skills. To encourage immediate implementation of leadership skills, Leadership utilizes an on-going service-learning project for course delivery and reinforcement. The course content is sequenced for students to identify, plan, implement, and evaluate a service-learning project based on the needs of their community/school. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an on-going component of the course.

HSB-Principles of Business

Abbreviated Name: ***HSB PRIN BUSINESS*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***52.0101***

Prerequisite: None

Schools must be affiliated with the High Schools of Business™ program to offer this course

Principles of Business, a project-based business course, develops student understanding and skills in such areas as business law, economics, financial analysis, human resources management, information management, marketing, operations, and strategic management. Through the use of three projects, students acquire an understanding and appreciation of the business world. They develop a business analysis report, conduct an environmental scan of the local business community, and investigate business activities. Current technology will be used to acquire information and to complete the projects. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an on-going component of the course.

HSB-Principles of Finance

Abbreviated Name: ***HSB PRIN FINANCE*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***52.0801***

Prerequisite: HSB-Principles of Marketing

Schools must be affiliated with the High Schools of Business™ program to offer this course

Principles of Finance furthers student understanding of two specific business activities—accounting and finance—that were introduced in an earlier High School of Business course, Principles of Business. Through multiple projects, students make connections between accounting, with an emphasis on cash flow, and finance, with an emphasis on decision-making. Students acquire an understanding of financial statements, calculate financial ratios, and make business decisions based on their interpretation of those financial statements and ratios. In addition, students determine business-financing options, as well as develop an appreciation for types of financial service providers and financial markets. Decision matrices are employed to aid in financial planning.

HSB-Principles of Management

Abbreviated Name: ***HSB PRIN MGMT*** *Credits:* ***.5*** *Level:* ***L3C*** *CIP Code:* ***52.0201***

Prerequisite: HSB-Principles of Finance

Schools must be affiliated with the High Schools of Business™ program to offer this course

Principles of Management is a project-based business course that expands student understanding of management. Students acquire an appreciation for aspects of management, such as project management, human resources management, knowledge management, quality management, and risk management. In addition, ethical and legal considerations affecting business activities are stressed, and students develop managerial and supervisory skills through interaction with lower grade-level High School of Business™ students. Decision matrices are employed to aid in management planning.

HSB-Principles of Marketing

Abbreviated Name: ***HSB PRIN MKTG*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***52.1401***

Prerequisite: HSB-Business Economics

Schools must be affiliated with the High Schools of Business™ program to offer this course

Principles of Marketing is a project-based business course that develops student understanding and skills in the functional areas of marketing: channel management, marketing-information management, market planning, pricing, product/service management, promotion, and selling. Students acquire an understanding and appreciation of each of the marketing functions and their ethical and legal issues. Decision matrices are employed to aid in market planning.

HSB-Wealth Management

Abbreviated Name: ***HSB WEALTH MGMT*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***52.0804***

Prerequisite: None

Schools must be affiliated with the High Schools of Business™ program to offer this course

This project-based financial literacy and investment course develops student understanding and skills in such areas as personal finance, types of investment, the stock market, and stock valuation. Students acquire an understanding and appreciation of the need for personal financial management and investing. To encourage immediate implementation of financial literacy and investment skills, Wealth Management utilizes an on-going investment project for course delivery and reinforcement. The course content is sequenced for students to develop a diversified, balanced investment portfolio based both on their interest in products and companies and on fundamental analysis. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills.

Office Management I

Abbreviated Name: ***OFFICE MGMT I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***52.0204***

Prerequisite: Business Software Applications

This course is a continuation of the Administrative Services programs. 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.

Office Management II

Abbreviated Name: ***OFFICE MGMT II*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***52.0204***

Prerequisite: Office Management I

This course is a continuation of the Administrative Services program and prepares students for work in an office or business environment. Students will learn and apply advanced skills in office technology and software commonly used in today's work environment. This course also includes the understanding of employment law and supervision. 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.

Office Management Advanced Studies

Abbreviated Name: ***OFFICE MGMT AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***52.0204***

Prerequisite: Office Management II

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Business Management and Administration

Abbreviated Name: ***WORK EXPER BUS ADM*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0004***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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.

- FINANCE -

Accounting and Finance I

Abbreviated Name: ***ACCT FINANCE I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***52.0304***

Prerequisite: None

This course is an introduction to both accounting and finance. This course is an introduction to accounting processes, practices, and concepts as well as an introduction to the world of finance. Topics include debits and credits, career pathways, and a survey of the many industries associated with accounting and finance such as accounting, banking, insurance and investments. Students will be introduced to standard accounting software.

Accounting and Finance II

Abbreviated Name: ***ACCT FINANCE II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***52.0304***

Prerequisite: Accounting and Finance I

This course is a continuation of Accounting and Finance I. Students will learn occupational skills in accounting such as recording business transactions, preparing financial statements, maintaining cash controls and calculating financial ratios. Students will practice using standard accounting software 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 III

Abbreviated Name: ***ACCT FINANCE III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***52.0304***

Prerequisite: Accounting and Finance II

This course is a continuation of Accounting and Finance II. 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 understanding of financial reports such as profit and loss statements, cash flow statements and pro forma statements. Ethics and regulations will be a 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

Abbreviated Name: ***ACCT FINANCE AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***52.0304***

Prerequisite: Accounting and Finance III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

NAF-Applied Finance

Abbreviated Name: ***NAF APPLIED FINC*** *Credits:* ***.5*** *Level:* ***L3*** *CIP Code:* ***52.0801***

Prerequisite: Must complete two or more Level 2 (L2) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Applied Finance delves into the financial concepts introduced in Principles of Finance. Students learn to identify the legal forms of business organization and continue to develop an understanding of profit. They learn about various financial analysis strategies and the methods by which businesses raise capital. Students also have the chance to explore, in depth, topics of high interest in the field of finance, and explore the types of careers that exist in finance today.

NAF-Business Economics

Abbreviated Name: ***NAF BUS ECON*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***52.0601***

Prerequisite: None

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Business Economics introduces students to the key concepts of economics as they pertain to business. This course discusses the American economy and the factors that influence the success of businesses and products. It describes forms of business ownership, discusses the relationship of labor and business, and provides a broad overview of the global economy. Students also examine careers in business, both as employees and as business owners.

NAF-Business in a Global Economy

Abbreviated Name: ***NAF BUS GLOB ECON*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***45.0605***

Prerequisite: Must complete one or more Level 1 (L1) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Business in a Global Economy provides students with an understanding of how and why businesses choose to expand their operations into other countries. This course exposes students to the unique challenges facing firms doing business internationally, and to the potential opportunities available to those businesses.

NAF-Entrepreneurship

Abbreviated Name: ***NAF ENTREPRENEUR*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***52.0701***

Prerequisite: Must complete one or more Level 1 (L1) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Entrepreneurship introduces students to the critical role entrepreneurs play in the national and global economy. Students learn the skills, attitudes, characteristics, and techniques necessary to become successful entrepreneurs. They explore starting a business and learn about the operational issues and financial risks that new businesses face. Students examine ethical issues and develop a framework for managing them.

NAF-Ethics in Business

Abbreviated Name: ***NAF ETHICS IN BUS*** *Credits:* ***.5*** *Level:* ***L3C*** *CIP Code:* ***38.0104***

Prerequisite: Must complete two or more Level 2 (L2) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

This course introduces the importance of ethics in business. Students focus on the significance of ethics to stakeholders; examine who bears responsibility for monitoring ethics; and explore ethical situations common in organizations. Students examine how ethics affects various business disciplines and consider the impact of organizational culture. Students also explore ethics as social responsibility, the evolution of ethics in international business, and how the free market and ethics can coexist.

NAF-Financial Planning

Abbreviated Name: ***NAF FINC PLANNING*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***52.0804***

Prerequisite: Must complete one or more Level 1 (L1) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Financial Planning provides students with an overview of the job of a financial planner. Students learn to consider how all aspects of financial planning might affect a potential client, and learn about the importance of financial planning in helping people reach their life goals. This course includes lessons on saving, borrowing, credit, and all types of insurance, and covers various types of investments. Students also examine careers in financial planning.

NAF-Financial Services

Abbreviated Name: ***NAF FINC SERVICES*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***52.0803***

Prerequisite: Must complete one or more Level 1 (L1) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

This course gives students an overview of banks and other financial services companies. It introduces students to the origins of money and banking and examines the early history of banking in the United States. Students study the financial services industry and the types of companies it includes in depth. They learn about the services offered by such companies and analyze the ways these companies earn profits. Finally, students examine careers in financial services.

NAF-Insurance

Abbreviated Name: ***NAF INSURANCE*** *Credits:* ***.5*** *Level:* ***L3C*** *CIP Code:* ***52.1701***

Prerequisite: Must complete one or more Level 3 (L3) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

This course introduces students to the insurance industry and to its critical role in the financial services sector and in society. It covers common types of insurance, including life, health and disability, property, liability, and forms of commercial insurance. Students examine the business model underlying the industry and how underwriting, actuarial science, and investment practices affect an insurance company's financial success.

NAF-Managerial Accounting

Abbreviated Name: ***NAF MANAGE ACCT*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***52.0305***

Prerequisite: Must complete one or more Level 1 (L1) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Managerial Accounting introduces the fundamentals of management accounting, including manufacturing and cost accounting, budgeting, accounting for managerial decision-making, and financial statement analysis. Students learn how to use accounting information for internal decision-making and planning and control. Regardless of the career path they choose, this course gives students the financial acumen necessary to make informed personal and business decisions.

NAF-Principles of Accounting

Abbreviated Name: ***NAF PRIN ACCT*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***52.0301***

Prerequisite: Must complete one or more Level 1 (L1) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Principles of Accounting provides students with an understanding of the accounting process and how it facilitates decision making by providing data and information to internal and external stakeholders. Students learn that accounting is an integral part of all business activities. They learn how to apply technology to accounting by creating formulas and inputting data into spreadsheets.

NAF-Principles of Finance

Abbreviated Name: ***NAF PRIN FINC*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***52.0801***

Prerequisite: None

Schools must be affiliated with the National Academy Foundation™ program to offer this course

This is the first course students take in the Academy of Finance and introduces students to the financial world. Students develop financial literacy as they learn about the function of finance in society. They study income and wealth; examine financial institutions; learn how businesses raise capital; and study key investment-related terms and concepts. They also research how innovations have changed the financial services field. Finally, students explore careers that exist in finance today.

Work Experience – Finance

Abbreviated Name: ***WORK EXPER FINANCE*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0006***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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.

- MARKETING, SALES & SERVICE -

Entrepreneurship I

Abbreviated Name: ***ENTREPRENEUR I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***52.0701***

Prerequisite: Principles of Business and Marketing

This course is a continuation of the Entrepreneurship program. Students will gain knowledge in the nature and scope of entrepreneurship, the impact of entrepreneurship on market economies, marketing functions and economic concepts related to entrepreneurship. Personal traits and behaviors of a successful entrepreneur are also examined. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Entrepreneurship II

Abbreviated Name: ***ENTREPRENEUR II*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***52.0701***

Prerequisite: Entrepreneurship I

This course is a continuation of the Entrepreneurship program. Students will expand their knowledge of the nature and scope of entrepreneurship, the impact of entrepreneurship on market economies, marketing functions and economic concepts related to entrepreneurship. Business plan development is the key tool by which students will learn concepts. 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.

Entrepreneurship Advanced Studies

Abbreviated Name: ***ENTREPRENEUR AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***52.0701***

Prerequisite: Entrepreneurship II

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

Marketing I

Abbreviated Name: ***MKTG I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***52.1401***

Prerequisite: Principles of Business and Marketing

This course is a continuation of the Marketing and Entrepreneurship programs. 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 II

Abbreviated Name: ***MKTG II*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***52.1401***

Prerequisite: Marketing I

This course is a continuation of the Marketing and Entrepreneurship programs. 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. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Marketing Advanced Studies

Abbreviated Name: ***MKTG AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***52.1401***

Prerequisite: Marketing II

This course is offered to students who have achieved all content standards in a program whose desire is 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

Abbreviated Name: ***PRIN BUS MKTG*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***52.0101***

Prerequisite: None

This course is an entry-level course in the Business Management, Entrepreneurship, Marketing, and Sports & Entertainment 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 skill, and participate in career exploration and planning.

Sports and Entertainment Marketing I

Abbreviated Name: ***SPORTS MKTG I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***52.1499***

Prerequisite: Principles of Business and Marketing

This course is a continuation of a Sports and Entertainment Marketing program. Students will advance their knowledge and skills in promotion, pricing, channel management, marketing-information management, market planning, market research, promotion, product management and professional selling as it relates to sports and entertainment. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Sports and Entertainment Marketing II

Abbreviated Name: ***SPORTS MKTG II*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***52.1499***

Prerequisite: Sports and Entertainment Marketing I

This course is a continuation of a Sports and Entertainment Marketing program. Students will advance their knowledge and skills in promotion, pricing, marketing-information management, market research, and development of the marketing plan as it relates to sports and entertainment industries. 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.

Sports and Entertainment Marketing Advanced Studies

Abbreviated Name: ***SPORTS MKTG AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***52.1499***

Prerequisite: Sports and Entertainment Marketing II

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Marketing Sales and Service

Abbreviated Name: ***WORK EXPER MARKET*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0014***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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 & Administration -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Business Management I	BUS MGMT I	L2	52.0201	1	N
Business Management II	BUS MGMT II	L3C	52.0201	1	N
Business Management Advanced Studies	BUS MGMT AS	AS	52.0201	1	N
Business Software Applications	BUS SOFT APPS	L1	52.0407	1	M
HSB-Business Economics	HSB BUS ECONOMICS	L1	52.0601	0.5	N
HSB-Business Strategies	HSB BUS STRATEGY	L3C	52.0299	0.5	N
HSB-Leadership	HSB LEADERSHIP	L1	52.0213	0.5	N
HSB-Principles of Business	HSB PRIN BUSINESS	L1	52.0101	0.5	N
HSB-Principles of Finance	HSB PRIN FINANCE	L2	52.0801	0.5	N
HSB-Principles of Management	HSB PRIN MGMT	L3C	52.0201	0.5	N
HSB-Principles of Marketing	HSB PRIN MKTG	L2	52.1401	0.5	N
HSB-Wealth Management	HSB WEALTH MGMT	L1	52.0804	0.5	N
Office Management I	OFFICE MGMT I	L2	52.0204	1	N
Office Management II	OFFICE MGMT II	L3C	52.0204	1	N
Office Management Advanced Studies	OFFICE MGMT AS	AS	52.0204	1	N
Work Experience - Business Management and Administration	WORK EXPER BUS ADM	WK	99.0004	1	N

- Finance -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Accounting and Finance I	ACCT FINANCE I	L1	52.0304	1	N
Accounting and Finance II	ACCT FINANCE II	L2	52.0304	1	N
Accounting and Finance III	ACCT FINANCE III	L3C	52.0304	1	N
Accounting and Finance Advanced Studies	ACCT FINANCE AS	AS	52.0304	1	N
NAF-Applied Finance	NAF APPLIED FINC	L3	52.0801	0.5	N
NAF-Business Economics	NAF BUS ECON	L1	52.0601	0.5	N
NAF-Business in a Global Economy	NAF BUS GLOB ECON	L2	45.0605	0.5	N
NAF-Entrepreneurship	NAF ENTREPRENEUR	L2	52.0701	0.5	F
NAF-Ethics in Business	NAF ETHICS IN BUS	L3C	38.0104	0.5	N
NAF-Financial Planning	NAF FINC PLANNING	L2	52.0804	0.5	N
NAF-Financial Services	NAF FINC SERVICES	L2	52.0803	0.5	M
NAF-Insurance	NAF INSURANCE	L3C	52.1701	0.5	N
NAF-Managerial Accounting	NAF MANAGE ACCT	L2	52.0305	0.5	N
NAF-Principles of Accounting	NAF PRIN ACCT	L2	52.0301	0.5	N
NAF-Principles of Finance	OFFICE MGMT AS	AS	52.0204	1	N
Work Experience - Finance	WORK EXPER BUS ADM	WK	99.0004	1	N

- Marketing, Sales & Service -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Entrepreneurship I	ENTREPRENEUR I	L2	52.0701	1	F
Entrepreneurship II	ENTREPRENEUR II	L3C	52.0701	1	F
Entrepreneurship Advanced Studies	ENTREPRENEUR AS	AS	52.0701	1	F
Marketing I	MKTG I	L2	52.1401	1	N
Marketing II	MKTG II	L3C	52.1401	1	N
Marketing Advanced Studies	MKTG AS	AS	52.1401	1	N
Principles of Business and Marketing	PRIN BUS MKTG	L1	52.0101	1	N
Sports and Entertainment Marketing I	SPORTS MKTG I	L2	52.1499	1	N
Sports and Entertainment Marketing II	SPORTS MKTG II	L3C	52.1499	1	N
Sports and Entertainment Marketing Advanced Studies	SPORTS MKTG AS	AS	52.1499	1	N
Work Experience – Marketing Sales and Service	WORK EXPER MARKET	WK	99.0014	1	N

This Page was Intentionally Left Blank.

EDUCATION, HOSPITALITY
&
HUMAN SERVICES

CAREER CLUSTERS & PROGRAM ALIGNMENT

- EDUCATION & TRAINING -

- Early Childhood Education
- Teaching & Training

- HOSPITALITY & TOURISM -

- Baking and Pastry
- Culinary Arts
- Hospitality & Tourism

- HUMAN SERVICES -

- Cosmetology
- Foods & Nutrition
- Family & Consumer Sciences
- Human Development

EDUCATION, HOSPITALITY & HUMAN SERVICES

PROGRAM COURSE SEQUENCES

- EDUCATION & TRAINING -

Program Name	Course Sequence	State Skill Standards*
Early Childhood Education	**Core Course Sequence** Early Childhood Education I Early Childhood Education II Early Childhood Education III **Complementary Course(s)** Human Development I ◊ Early Childhood Education II LAB ** Early Childhood Education III LAB ** Early Childhood Education Advanced Studies	Early Childhood Education
Teaching and Training	**Core Course Sequence** Teaching and Training I Teaching and Training II Teaching and Training III **Complementary Course(s)** Teaching and Training Advanced Studies	Teaching & 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 level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.
◊ Course description listed in the Human Services section.

- HOSPITALITY & TOURISM -

Program Name	Course Sequence	State Skill Standards*
Baking and Pastry	**Core Course Sequence** Culinary Arts I Baking and Pastry I Baking and Pastry II **Complementary Course(s)** Baking and Pastry I LAB ** Baking and Pastry II LAB ** Baking and Pastry Advanced Studies	Baking and Pastry
Culinary Arts	**Core Course Sequence** Culinary Arts I Culinary Arts II Culinary Arts III **Complementary Course(s)** Foods and Nutrition I ◊ Culinary Arts II LAB ** Culinary Arts III LAB ** Culinary Arts Advanced Studies	Culinary Arts

* 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.
◊ Course description listed in the Human Services section.

- HOSPITALITY & TOURISM -
(CONTINUED)

Program Name	Course Sequence	State Skill Standards*
Hospitality & Tourism	**Core Course Sequence** Hospitality and Tourism I Hospitality and Tourism II Hospitality and Tourism III **Complementary Course(s)** Hospitality and Tourism II LAB ** Hospitality and Tourism III LAB ** Hospitality and Tourism Advanced Studies	Hospitality & Tourism
National Academy Foundation Academy of Hospitality & Tourism	**Core Course Sequence** NAF-Principles of Hospitality and Tourism / NAF-Customer Service NAF-Geography for Tourism / NAF-Sustainable Tourism NAF-Hospitality Marketing / NAF-Sports, Entertainment and Event Planning **Complementary Course(s)** Hospitality and Tourism Advanced Studies	Hospitality & 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 level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.

- HUMAN SERVICES -

Program Name	Course Sequence	State Skill Standards*
Cosmetology	**Core Course Sequence** Principles of Cosmetology Cosmetology I Cosmetology II	Cosmetology
Family and Consumer Sciences	**Core Course Sequence** Foods and Nutrition I Human Development I Fashion Design and Construction I ◊ Family and Consumer Sciences **Complementary Course(s)** Interior Design I ◊	Family and Consumer Sciences
Foods and Nutrition	**Core Course Sequence** Foods and Nutrition I Foods and Nutrition II Foods and Nutrition III **Complementary Course(s)** Foods and Nutrition Advanced Studies	Foods and Nutrition
Human Development	**Core Course Sequence** Human Development I Human Development II Human Development III **Complementary Course(s)** Human Development Advanced Studies	Human 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 level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.
◊ Course description listed in the Arts, A/V Technology and Communication Section. (Information & Media Technologies)

COURSE DESCRIPTIONS

- EDUCATION & TRAINING -

Early Childhood Education I

Abbreviated Name: ***EARLY CHILD I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***13.1210***

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

Abbreviated Name: ***EARLY CHILD II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***13.1210***

Prerequisite: Early Childhood Education I

This course is a continuation of Early Childhood Education I. This course prepares intermediate early childhood education students to guide the development of young children in an educational setting. Course content includes child development, care, teaching and learning. Project-based learning experiences include planning and implementing developmentally appropriate activities, health and safety practices, and legal requirements of teaching young children. Students will 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

Abbreviated Name: ***EARLY CHILD II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***13.1210***

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 III

Abbreviated Name: ***EARLY CHILD III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***13.1210***

Prerequisite: Early Childhood Education II

This course is a continuation of Early Childhood Education II. This course provides advanced early childhood education students with instruction in advanced techniques and processes. Students will continue to develop all skills learned in Early Childhood Education I and II. 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.

Early Childhood Education III LAB

Abbreviated Name: ***EARLY CHILD III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***13.1210***

Prerequisite: Concurrent enrollment in Early Childhood Education III

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

Abbreviated Name: ***EARLY CHILD AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***13.1210***

Prerequisite: Early Childhood Education III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Teaching and Training I

Abbreviated Name: ***TEACH TRNG I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***13.1206***

Prerequisite: None

This course provides students with an introduction to the principles of teaching and training. Areas of emphasis include teaching and learning theory, characteristics of an educator, planning developmentally appropriate lessons, health and safety practices, and fundamentals for development of learners in an educational setting. Students will explore instructional practices that integrate diversity awareness including appreciation of all cultures and their important contributions to society. The appropriate use of technology and industry-standard equipment are an integral part of the course. Students will research the requirements of teaching and training careers and begin to develop a career portfolio.

Teaching and Training II

Abbreviated Name: ***TEACH TRNG II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***13.1206***

Prerequisite: Education and Training I

This course is a continuation of Teaching and Training I. This course provides Teaching and Training II students with instruction in intermediate techniques and processes including ethics, professionalism, reflective practice, lesson planning and implementation, classroom management, characteristics of a diverse learner, and rules and regulations. The appropriate use of technology and industry-standard equipment are an integral part of the course. Students will research the requirements of teaching and training careers and continue to develop a career portfolio.

Teaching and Training III

Abbreviated Name: ***TEACH TRNG III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***13.1206***

Prerequisite: Education and Training II

This course is a continuation of Teaching and Training II. This course provides Teaching and Training III students with instruction in advanced techniques and processes. Students will continue to develop all skills learned in Teaching and Training I and II. 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.

Teaching and Training Advanced Studies

Abbreviated Name: ***TEACH TRNG AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***13.1206***

Prerequisite: Education and Training III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Education and Training

Abbreviated Name: ***WORK EXPER EDUC*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0005***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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.

- HOSPITALITY & TOURISM -

Baking and Pastry I

Abbreviated Name: ***BAKING I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***12.0501***

Prerequisite: Culinary Arts I

This course is an option following Culinary Arts I. This course allows culinary students more in-depth study of baking and pastry arts. Areas of study include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and methods used in creating breads, pastries, cookies, and other desserts. The fundamentals of dough and basic decorating skills are covered. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Baking and Pastry I LAB

Abbreviated Name: ***BAKING I L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***12.0501***

BAKING I L 1 L2L 12.0501

Prerequisite: Concurrent enrollment in Baking and Pastry 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 this program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Baking and Pastry II

Abbreviated Name: ***BAKING II*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***12.0501***

Prerequisite: Baking and Pastry I

This course is a continuation of Baking and Pastry I. This course provides advanced baking students with instruction in advanced techniques and processes. They will continue to develop skills learned in Culinary Arts I and Baking and Pastry 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.

Baking and Pastry II LAB

Abbreviated Name: ***BAKING II L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***12.0501***

Prerequisite: Concurrent enrollment in Baking and Pastry 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.

Baking and Pastry Advanced Studies

Abbreviated Name: ***BAKING AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***12.0501***

Prerequisite: Baking and Pastry II

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Culinary Arts I

Abbreviated Name: ***CUL ARTS I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***12.0503***

Prerequisite: None

This course provides students with an introduction to the principles and techniques of commercial food production. The classroom is patterned after industry with emphasis on the standards of food service occupations. 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

Abbreviated Name: ***CUL ARTS II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***12.0503***

Prerequisite: Culinary Arts I

This course is a continuation of Culinary Arts I. This course allows intermediate 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. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Culinary Arts II LAB

Abbreviated Name: ***CUL ARTS II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***12.0503***

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 III

Abbreviated Name: ***CUL ARTS III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***12.0503***

Prerequisite: Culinary Arts II

This course is a continuation of Culinary Arts II. This course provides advanced culinary students with instruction in advanced techniques and processes. They will continue to develop all skills learned in Culinary Arts I and II. 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.

Culinary Arts III LAB

Abbreviated Name: ***CUL ARTS III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***12.0503***

Prerequisite: Concurrent enrollment in Culinary Arts III

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

Abbreviated Name: ***CUL ARTS AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***12.0503***

Prerequisite: Culinary Arts III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Hospitality and Tourism I

Abbreviated Name: ***HOSPLTY TOUR I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***52.0901***

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

Abbreviated Name: ***HOSPLTY TOUR II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***52.0901***

Prerequisite: Hospitality and Tourism I

This course is a continuation of Hospitality and Tourism I. This course allows intermediate hospitality and tourism students to build on fundamental skills developed in hospitality and tourism I. Students will receive additional training in all aspects of hotel and tourism operations, 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

Abbreviated Name: ***HOSPLTY TOUR II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***52.0901***

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 III

Abbreviated Name: ***HOSPLTY TOUR III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***52.0901***

Prerequisite: Hospitality and Tourism II

This course is a continuation of Hospitality and Tourism II. This course provides advanced hospitality and tourism students with instruction in more advanced concepts related to lodging, food and beverage, recreation, amusement and attractions, sales, catering and convention services as well as business functions and guest service. 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.

Hospitality and Tourism III LAB

Abbreviated Name: ***HOSPLTY TOUR III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***52.0901***

Prerequisite: Concurrent enrollment in Hospitality and Tourism III

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

Abbreviated Name: ***HOSPLTY TOUR AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***52.0901***

Prerequisite: Hospitality and Tourism III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

NAF-Customer Service

Abbreviated Name: ***NAF CUSTOMER SERV*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***52.0207***

Prerequisite: None

Schools must be affiliated with the National Academy Foundation™ program to offer this course

This course introduces students to the concept of service as a critical component of a hospitality or tourism business. Students analyze both good and poor customer service in a variety of contexts and through various methods. Students explore communication skills and strategies, and they use a problem-solving perspective to understand barriers to communication and good service. They learn various means of measuring the quality of service and explore careers that focus on customer service.

NAF-Geography for Tourism

Abbreviated Name: ***NAF GEO TOURISM*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***52.1906***

Prerequisite: Must complete one or more Level 1 (L1) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

This course introduces students to the importance of geography in the hospitality and tourism industry through the study of travel or "destination" geography. It introduces students to the concepts and vocabulary of geography as they explore the world's geographic regions, focusing on factors that create desirable travel destinations: weather/climate, physical features, cultural elements, and historical interest.

NAF-Hospitality Marketing

Abbreviated Name: ***NAF HOSPLTY MKTG*** *Credits:* ***.5*** *Level:* ***L3C*** *CIP Code:* ***52.1910***

Prerequisite: Must complete two or more Level 2 (L2) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Hospitality Marketing introduces students to the objectives, strategies, and tools that are important to marketing in the hospitality industry, expanding on topics introduced in Principles of Hospitality and Tourism. Students learn about each phase of marketing and the wide range of options that all marketing managers and business owners consider as they create, or revise, marketing plans. Students also explore career opportunities in the field of hospitality marketing.

NAF-Principles of Hospitality and Tourism

Abbreviated Name: ***NAF PRIN HOSPLTY*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***52.0901***

Prerequisite: None

Schools must be affiliated with the National Academy Foundation™ program to offer this course

This is the first course students take in the Academy of Hospitality & Tourism and provides an overview of the current hospitality and tourism industry. Students learn about the history of the industry, explore traveler motivation and consumer needs, the industry's economic and environmental impacts, domestic and international travel, and sales in tourism. Finally, students explore careers in the hospitality and tourism industry.

NAF-Sports, Entertainment and Event Planning

Abbreviated Name: ***NAF EVENT PLANNING*** *Credits:* ***.5*** *Level:* ***L3C*** *CIP Code:* ***52.0907***

Prerequisite: Must complete one or more Level 2 (L2) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

This course introduces students to the skills and knowledge required in the event planning profession. After studying the steps involved in planning a special event, students learn about event planning in sports. They then examine the unique requirements of event planning in entertainment and the performing arts. Students gain valuable experience in project management that can be applied to any career path. They also examine careers in the field of event planning.

NAF-Sustainable Tourism

Abbreviated Name: ***NAF SUSTAIN TOUR*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***52.1999***

Prerequisite: Must complete one or more Level 1 (L1) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

This course introduces students to the profound changes taking place worldwide in the tourism industry. Students examine the environmental and socioeconomic impacts and interrelationships of tourism, as well as the transition to a greener tourism economy. They explore the ramifications of tourism development in terms of increased sustainability, profitability, and benefits to the surrounding communities, and they examine ecotourism as a model for sustainability.

Work Experience – Hospitality and Tourism

Abbreviated Name: ***WORK EXPER HOSP*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0009***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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.

- HUMAN SERVICES -

Cosmetology I

Abbreviated Name: ***COSMO I*** *Credits:* ***6*** *Level:* ***L2*** *CIP Code:* ***12.0401***

Prerequisite: Principles of Cosmetology

The six-credit-block course is designed to prepare students for the Nevada State Board of Cosmetology Licensing Exam and to meet the 1800-hour requirement for licensure. Students have the opportunity to receive 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

Abbreviated Name: ***COSMO II*** *Credits:* ***6*** *Level:* ***L3C*** *CIP Code:* ***12.0401***

Prerequisite: Cosmetology I

The six-credit-block course is designed to prepare students for the Nevada State Board of Cosmetology Licensing Exam and to meet the 1800-hour requirement for licensure. Students have the opportunity to receive 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. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Family and Consumer Sciences

Abbreviated Name: ***FACS*** *Credits:* ***1*** *Level:* ***L4C*** *CIP Code:* ***19.0101***

Prerequisite: Fashion Design and Construction I & Foods and Nutrition I & Human Development I

This course is the capstone course for the Family and Consumer Sciences program of study. This course provides advanced studies in family and consumer sciences topics to prepare students for adult roles and responsibilities, as well as related occupations. The major focus is on developing skills for balancing home, work, and life by studying how to be successful with life management, wealth management, family development, home management, health and fitness, and leadership and community participation. 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.

Foods and Nutrition I

Abbreviated Name: ***FOODS I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***19.0501***

Prerequisite: None

This course provides an introduction to the study of foods and nutrition. Emphasis is placed on the exploration of foods and meal planning in relation to nutrition science, fitness, the lifecycle, customs, and preparation techniques. Kitchen safety, sanitation, and resources management are integral parts of this course.

Foods and Nutrition II

Abbreviated Name: ***FOODS II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***19.0501***

Prerequisite: Foods and Nutrition I

This course is a continuation of Foods and Nutrition I. This course provides intermediate students with more advanced activities in food science and nutrition with an introduction to careers in food sciences and food manufacturing industries. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Foods and Nutrition III

Abbreviated Name: ***FOODS III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***19.0501***

Prerequisite: Foods and Nutrition II

This course is a continuation of Foods and Nutrition II. This course provides advanced foods and nutrition students with instruction in advanced techniques and processes. Students will continue to develop all skills learned in Foods and Nutrition I and II. The appropriate use of technology and industry-stand 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.

Foods and Nutrition Advanced Studies

Abbreviated Name: ***FOODS AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***19.0501***

Prerequisite: Foods and Nutrition III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Human Development I

Abbreviated Name: ***HUMAN DEVLOP I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***19.0701***

Prerequisite: None

This course introduces the topic of Human Development. Areas of study include the stages of human growth and development throughout the lifespan with a focus on conception through childhood. Topics include developmental stages and influences on physical, intellectual, social and emotional growth.

Human Development II

Abbreviated Name: ***HUMAN DEVLOP II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***19.0701***

Prerequisite: Human Development I

This course is a continuation of Human Development I. This course allows intermediate human development students to increase their understanding of human growth and development throughout the lifespan with a focus on adolescence through young adulthood. Topics include developmental stages and influences on physical, intellectual, social and emotional growth.

Human Development III

Abbreviated Name: ***HUMAN DEVLOP III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***19.0701***

Prerequisite: Human Development II

This course is a continuation of Human Development II. This course allows advanced human development students to increase their understanding of human growth and development throughout the lifespan with a focus on middle adulthood through late adulthood. Topics include developmental stages and influences on physical, intellectual, social and emotional growth. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Human Development Advanced Studies

Abbreviated Name: ***HUMAN DEVLOP AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***19.0701***

Prerequisite: Human Development III

This course is offered to students who have achieved all content standards in a program whose desire is 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 Cosmetology

Abbreviated Name: ***PRIN COSMO*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***12.0401***

Prerequisite: None

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.

Work Experience – Human Services

Abbreviated Name: ***WORK EXPER HU SERV*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0010***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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 & TRAINING -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Early Childhood Education I	EARLY CHILD I	L1	13.1210	1	M
Early Childhood Education II	EARLY CHILD II	L2	13.1210	1	M
Early Childhood Education II LAB	EARLY CHILD II L	L2L	13.1210	1	M
Early Childhood Education III	EARLY CHILD III	L3C	13.1210	1	M
Early Childhood Education III LAB	EARLY CHILD III L	L3L	13.1210	1	M
Early Childhood Education Advanced Studies	EARLY CHILD AS	AS	13.1210	1	M
Teaching and Training I	TEACH TRNG I	L1	13.1206	1	M
Teaching and Training II	TEACH TRNG II	L2	13.1206	1	M
Teaching and Training III	TEACH TRNG III	L3C	13.1206	1	M
Teaching and Training Advanced Studies	TEACH TRNG AS	AS	13.1206	1	M
Work Experience - Education and Training	WORK EXPER EDUC	WK	99.0005	1	M

- HOSPITALITY & TOURISM -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Baking and Pastry I	BAKING I	L2	12.0501	1	N
Baking and Pastry I LAB	BAKING I L	L2L	12.0501	1	N
Baking and Pastry II	BAKING II	L3C	12.0501	1	N
Baking and Pastry II LAB	BAKING II L	L3L	12.0501	1	N
Baking and Pastry Advanced Studies	BAKING AS	AS	12.0501	1	N
Culinary Arts I	CUL ARTS I	L1	12.0503	1	F
Culinary Arts II	CUL ARTS II	L2	12.0503	1	F
Culinary Arts II LAB	CUL ARTS II L	L2L	12.0503	1	F
Culinary Arts III	CUL ARTS III	L3C	12.0503	1	F
Culinary Arts III LAB	CUL ARTS III L	L3L	12.0503	1	F
Culinary Arts Advanced Studies	CUL ARTS AS	AS	12.0503	1	F
Hospitality and Tourism I	HOSPLTY TOUR I	L1	52.0901	1	N
Hospitality and Tourism II	HOSPLTY TOUR II	L2	52.0901	1	N
Hospitality and Tourism II LAB	HOSPLTY TOUR II L	L2L	52.0901	1	N
Hospitality and Tourism III	HOSPLTY TOUR III	L3C	52.0901	1	N
Hospitality and Tourism III LAB	HOSPLTY TOUR III L	L3L	52.0901	1	N
Hospitality and Tourism Advanced Studies	HOSPLTY TOUR AS	AS	52.0901	1	N

- HOSPITALITY & TOURISM -
(CONTINUED)

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
NAF-Customer Service	NAF CUSTOMER SERV	L1	52.0207	0.5	N
NAF-Geography for Tourism	NAF GEO TOURISM	L2	52.1906	0.5	N
NAF-Hospitality Marketing	NAF HOSPLTY MKTG	L3C	52.1910	0.5	N
NAF-Principles of Hospitality and Tourism	NAF PRIN HOSPLTY	L1	52.0901	0.5	N
NAF-Sports, Entertainment and Event Planning	NAF EVENT PLANNING	L3C	52.0907	0.5	F
NAF-Sustainable Tourism	NAF SUSTAIN TOUR	L2	52.1999	0.5	N
Work Experience - Hospitality and Tourism	WORK EXPER HOSP	WK	99.0009	1	N

- HUMAN SERVICES -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Cosmetology I	COSMO I	L2	12.0401	6	M
Cosmetology II	COSMO II	L3C	12.0401	6	M
Family and Consumer Sciences	FACS	L4C	19.0101	1	N
Foods and Nutrition I	FOODS I	L1	19.0501	1	M
Foods and Nutrition II	FOODS II	L2	19.0501	1	M
Foods and Nutrition III	FOODS III	L3C	19.0501	1	M
Foods and Nutrition Advanced Studies	FOODS AS	AS	19.0501	1	M
Human Development I	HUMAN DEVLOP I	L1	19.0701	1	N
Human Development II	HUMAN DEVLOP II	L2	19.0701	1	N
Human Development III	HUMAN DEVLOP III	L3C	19.0701	1	N
Human Development Advanced Studies	HUMAN DEVLOP AS	AS	19.0701	1	N
Principles of Cosmetology	PRIN COSMO	L1	12.0401	1	M
Work Experience – Human Services	WORK EXPER HU SERV	WK	99.0010	1	M

.

HEALTH SCIENCE
&
PUBLIC SAFETY

CAREER CLUSTERS & PROGRAM ALIGNMENT

- GOVERNMENT & PUBLIC ADMINISTRATION -

- Military Science

- HEALTH SCIENCE -

- Biomedical
- Community Health Science
- Dental Science
- Emergency Medical Technician
- Health Information Management
- Medical Assisting
- Nursing Assistant
- Pharmacy Practice
- Respiratory Science
- Sports Medicine

- LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY -

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

HEALTH SCIENCE & PUBLIC SAFETY

PROGRAM COURSE SEQUENCES

- GOVERNMENT & PUBLIC ADMINISTRATION -

Program Name	Course Sequence	State Skill Standards*
Military Science	**Core Course Sequence** Military Science I Military Science II Military Science III Military Science IV	Military Science *TBD*

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

- HEALTH SCIENCE -

Program Name	Course Sequence	State Skill Standards*
Biomedical	**Core Course Sequence** Biomedical I Biomedical II Biomedical III **Complementary Course(s)** Biomedical Advanced Studies	Biomedical
Project Lead The Way™ Biomedical Sciences	**Project Lead The Way™ (PLTW):Biomedical Sciences** PLTW-Principles of Biomedical Sciences PLTW-Human Body Systems PLTW-Medical Interventions PLTW-Biomedical Innovation	Biomedical
Community Health Science	**Core Course Sequence** Health Science I Health Science II - *or* - Medical Terminology Community Health Science **Complementary Course(s)** Community Health Science Advanced Studies	Community Health Science
Dental Science	**Core Course Sequence** Dental Science I Dental Science II Dental Science III **Complementary Course(s)** Dental Science Advanced Studies	Dental Science
Emergency Medical Technician	**Core Course Sequence** Health Science I Health Science II - *or* - Emergency Medical Services Emergency Medical Technician **Complementary Course(s)** Foundations of Public Safety ◊ Emergency Medical Technician LAB **	Health Science & Emergency Medical Technician

* 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.

◊ Course description listed in the Law, Public Safety, Corrections & Security section.

- HEALTH SCIENCE -
(CONTINUED)

Program Name	Course Sequence	State Skill Standards*
Health Information Management	**Core Course Sequence** Health Science I Health Information Management I Health Information Management II **Complementary Course(s)** Health Information Management Advanced Studies	Health Science & Health Information Management
Medical Assisting	**Core Course Sequence** Health Science I Health Science II - *or* - Medical Terminology Medical Assisting **Complementary Course(s)** Medical Assisting LAB ** Medical Assisting Advanced Studies	Health Science & Medical Assisting
Nursing Assistant	**Core Course Sequence** Health Science I Health Science II - *or* - Medical Terminology Nursing Assistant **Complementary Course(s)** Nursing Assistant LAB **	Health Science & Nursing Assistant
Pharmacy Practice	**Core Course Sequence** Health Science I Health Science II - *or* - Medical Terminology Pharmacy Practice **Complementary Course(s)** Pharmacy Practice Advanced Studies	Health Science & Pharmacy Practice
Respiratory Science	**Core Course Sequence** Respiratory Science I Respiratory Science II Respiratory Science III **Complementary Course(s)** Respiratory Science Advanced Studies	Respiratory Science
Sports Medicine	**Core Course Sequence** Health Science I Sports Medicine I Sports Medicine II **Complementary Course(s)** Health Science II Sports Medicine Advanced Studies	Health Science & 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 level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.

- LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY -

Program Name	Course Sequence	State Skill Standards*
Criminal Justice	**Core Course Sequence** Criminal Justice I - *or* - Foundations of Public Safety Criminal Justice II Criminal Justice III **Complementary Course(s)** Criminal Justice Advanced Studies	Criminal Justice
Emergency Telecommunications	**Core Course Sequence** Emergency Telecommunications I Emergency Telecommunications II **Complementary Course(s)** Foundations of Public Safety Emergency Telecommunications II LAB **	Emergency Telecommunications
Fire Science	**Core Course Sequence** Fire Science I Fire Science II Entry Level Firefighting **Complementary Course(s)** Fire Science Advanced Studies	Fire Science
Forensic Science	**Core Course Sequence** Forensic Science I - *or* - Foundations of Public Safety Forensic Science II Forensic Science III **Complementary Course(s)** Forensic Photography Forensic Science Advanced Studies	Forensic Science
Law Enforcement	**Core Course Sequence** Law Enforcement I - *or* - Foundations of Public Safety Law Enforcement II Law Enforcement III **Complementary Course(s)** Law Enforcement Advanced Studies	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 level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.

COURSE DESCRIPTIONS

- GOVERNMENT & PUBLIC ADMINISTRATION -

Military Science I

Abbreviated Name: ***MIL SCI I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***28.0503***

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, Army, Marine Corps or Navy)

Military Science II

Abbreviated Name: ***MIL SCI II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***28.0503***

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, Army, Marine Corps or Navy) The appropriate use of technology and industry-standard equipment is an integral part of this course.

Military Science III

Abbreviated Name: ***MIL SCI III*** *Credits:* ***1*** *Level:* ***L3*** *CIP Code:* ***28.0503***

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, Army, Marine Corps or Navy) The appropriate use of technology and industry-standard equipment is an integral part of this course.

Military Science IV

Abbreviated Name: ***MIL SCI IV*** *Credits:* ***1*** *Level:* ***L4C*** *CIP Code:* ***28.0503***

Prerequisite: Military Science III

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.

- HEALTH SCIENCE -

Biomedical I

Abbreviated Name: ***BIOMED I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***26.0102***

Prerequisite: None

This course introduces students to advanced science courses related to medical fields. Areas of exploration will include infectious, genetic, and life style 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

Abbreviated Name: ***BIOMED II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***26.0102***

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

Abbreviated Name: ***BIOMED III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***26.0102***

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

Abbreviated Name: ***BIOMED AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***26.0102***

Prerequisite: Biomedical III

This course is offered to students who have achieved all content standards in a program whose desire is 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

Abbreviated Name: ***CMTY HEALTH SCI*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***51.2208***

Prerequisite: Health Science II or Medical Terminology

This course is designed to provide students with the knowledge and skills required for entry into the healthcare field. The course is designed to provide students with knowledge and skills required for entry into the healthcare field area of study that includes personal health, public health biology, social and behavioral health, environmental health, epidemiology, biostatistics, social justice, communities and career development. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Community Health Science Advanced Studies

Abbreviated Name: ***CMTY HEALTH SCI AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***51.2208***

Prerequisite: Community Health Science

This course is offered to students who have achieved all content standards in a program whose desire is 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

Abbreviated Name: ***DENTAL SCI I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***51.0601***

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

Abbreviated Name: ***DENTAL SCI II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***51.0601***

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.

Dental Science III

Abbreviated Name: ***DENTAL SCI III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***51.0601***

Prerequisite: Dental Science II

This course is a continuation of Dental Science II. This course provides advanced dental science students with instruction in advanced techniques and processes. The students will continue to develop all skills learned in Dental Science II. The appropriate use of technology and industry-standard equipment is an integral part of this course. An internship may be incorporated into the course of study to assist students in making a transition from school to work. 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

Abbreviated Name: ***DENTAL SCI AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***51.0601***

Prerequisite: Dental Science III

This course is offered to students who have achieved all content standards in a program whose desire is 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 Services

Abbreviated Name: ***EMER MED SERVICES*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***51.0810***

Prerequisite: Health Science I

This course is a continuation of Health Science I. This entry-level course is designed for the student interested in a career in the pre-hospital emergency medical provider field. Areas of study include personal safety, patient transport (moving and lifting), basic first aid to include medical and trauma emergencies, and CPR. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Emergency Medical Technician

Abbreviated Name: ***EMER MED TECH*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***51.0904***

Prerequisite: Health Science II or Emergency Medical Services

This course is a continuation of Health Science II or Emergency Medical Services. 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

Abbreviated Name: ***EMER MED TECH L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***51.0904***

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.

Health Information Management I

Abbreviated Name: ***HLTH INFO MGMT I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***51.0707***

Prerequisite: Health Science I or Medical Terminology

This course is designed to familiarize students with computerized account management and to help students develop confidence and skills necessary to become successful users of Medical Account Management software. Areas of study include understanding the legal aspects of HIPAA and responsibilities of a medical office staff; utilizing a computer program to maintain patient files, store information, match CRT and diagnosis codes with treatment procedures and charges; creating insurance claim forms and following the claim until they are reimbursed and perform related tasks; and creating a professional resume and cover letter appropriate for applying for a medical assistant position in a medical practice. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Health Information Management II

Abbreviated Name: ***HLTH INFO MGMT II*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***51.0707***

Prerequisite: Health Information Management I

This course is a continuation of Health Information Management I. This course allows advanced health information management students to develop their knowledge and skills learned in Health Information Management I. Emphasis will be placed on advanced records management including EMR Software Programs. Reception office skills will cover telephone, scheduling, medical insurance, HIPAA and legal issues. This is an advanced class and will give students necessary practice and experience to work in a medical front office or related field. 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.

Health Information Management Advanced Studies

Abbreviated Name: ***HLTH INFO MGMT AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***51.0707***

Prerequisite: Health Information Management II

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

Health Professions

Abbreviated Name: ***HLTH PROFESSIONS*** *Credits:* ***1*** *Level:* ***L3*** *CIP Code:* ***51.9999***

Prerequisite: None

This course is designed to assist students in exploration of a range of health occupations to determine which field best suits their interests, strengths, and abilities. Areas of study include infectious diseases, genetics, medical ethics, nutrition, psychology, pediatrics gerontology, health education, anatomy/physiology, and communication for medical professionals. Students will also be exposed to traditional clinical settings, as well as non-clinical settings such as nutrition, health inspection, communicable diseases, counseling, and alternative medicine. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Health Professions LAB

Abbreviated Name: ***HLTH PROFESSIONS L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***51.9999***

Prerequisite: Concurrent enrollment in Health Professions

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

Health Science I

Abbreviated Name: ***HEALTH SCI I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***51.0000***

Prerequisite: None

This 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. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Health Science II

Abbreviated Name: ***HEALTH SCI II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***51.0000***

Prerequisite: Health Science I

This course is a continuation of Health Science I. This course provides advanced health science students with instruction in advanced techniques and processes. Areas of study include medical ethics, hazardous materials, and safety in the workplace, epidemiology, and green practices in healthcare. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this program, students will be prepared for entry into a medical program at the college level.

Medical Assisting

Abbreviated Name: ***MEDICAL ASST*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***51.0801***

Prerequisite: Health Science II

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

Abbreviated Name: ***MEDICAL ASST L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***51.0801***

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

Abbreviated Name: ***MEDICAL ASST AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***51.0801***

Prerequisite: Medical Assisting

This course is offered to students who have achieved all content standards in a program whose desire is 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 Terminology

Abbreviated Name: ***MEDICAL TERM*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***51.0899***

Prerequisite: Health Science I

This course is designed to introduce students to the vocabulary, knowledge, and skills required for entry into health-related occupations. Students receive instruction in the vocabulary of human anatomy and physiology, basic health care skills, first aid, cardiopulmonary resuscitation (CPR), and healthcare practices. Students' medical, ethical, and legal responsibilities pertaining to future careers in the health field will be integrated into the course. Students will also be introduced to health-related occupational skills required in the world of work.

Nursing Assistant

Abbreviated Name: ***NURSING ASST*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***51.3902***

Prerequisite: Health Science II or Medical Terminology

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

Abbreviated Name: ***NURSING ASST L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***51.3902***

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.

Pharmacy Practice

Abbreviated Name: ***PHARMACY PRACT*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***51.0805***

Prerequisite: Health Science II or Medical Terminology

This course provides students with the introduction to the practices and fundamentals of pharmacology. Areas of study include pharmacy, calculations, routes, inventory management, and factors affecting drug activity. 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.

Pharmacy Practice Advanced Studies

Abbreviated Name: ***PHARMACY PRACT AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***51.0805***

Prerequisite: Pharmacy Practice

This course is offered to students who have achieved all content standards in a program whose desire is 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.

PLTW-Biomedical Innovation

Abbreviated Name: ***PLTW BIOMED INNOV*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***26.0102***

Prerequisite: PLTW-Medical Interventions

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course serves as the capstone course for the Biomedical Sciences Project Lead the Way™ curriculum. Students design innovative solutions for the health challenges of the 21st century. They work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project with a mentor or advisor from a university, hospital, research institution, or the biomedical industry. Throughout the course, students are expected to present their work to an audience of STEM professionals.

PLTW-Human Body Systems

Abbreviated Name: ***PLTW HUM BODY SYS*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***26.0102***

Prerequisite: PLTW-Principles of Biomedical Sciences

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is a continuation of the Biomedical Sciences Project Lead the Way™ curriculum. Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the roles of biomedical professionals to solve medical mysteries.

PLTW-Medical Interventions

Abbreviated Name: ***PLTW MED INTERVENT*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***26.0102***

Prerequisite: PLTW-Human Body Systems

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is a continuation of the Biomedical Sciences Project Lead the Way™ curriculum. Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family. The course is a "How-To" manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

PLTW-Principles of Biomedical Sciences

Abbreviated Name: ***PLTW PRIN BIOMED*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***26.0102***

Prerequisite: None

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is the entry-level course of the Biomedical Sciences Project Lead the Way™ curriculum. Students investigate various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, and research processes. This course provides an overview of all the courses in the Biomedical Sciences program and lay the scientific foundation for subsequent courses.

Respiratory Science I

Abbreviated Name: ***RESP SCI I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***51.0908***

Prerequisite: None

This course provides students with the principles of respiratory science. Areas of emphasis include medical terminology, communication in the healthcare setting, anatomy and physiology, medical math, and applied respiratory science. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Respiratory Science II

Abbreviated Name: ***RESP SCI II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***51.0908***

Prerequisite: Respiratory Science I

This course is a continuation of Respiratory Science I. This course provides intermediate respiratory science students with instruction in cardiopulmonary anatomy and physiology, roles of the healthcare team, legal and ethical responsibilities, and practices in patient care. The students will continue to develop all skills learned in Respiratory Science I. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Respiratory Science III

Abbreviated Name: ***RESP SCI III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***51.0908***

Prerequisite: Respiratory Science II

This course is a continuation of Respiratory Science II. This course provides advanced respiratory science students with instruction in patient assessment, technical skills, population proficiencies, and evidence based medicine. The students will continue to develop all skills learned in Respiratory Science II. 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.

Respiratory Science Advanced Studies

Abbreviated Name: ***RESP SCI AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***51.0908***

Prerequisite: Respiratory Science III

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

Sports Medicine I

Abbreviated Name: ***SPORTS MED I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***51.0913***

Prerequisite: Health Science I

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, physical fitness, anatomy and physiology, kinesiology, injury evaluation and prevention procedures, and careers in sports medicine. Students will also demonstrate skills in cardiopulmonary resuscitation (CPR), first aid, and sports injury management and rehabilitation. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Sports Medicine II

Abbreviated Name: ***SPORTS MED II*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***51.0913***

Prerequisite: Sports Medicine I

This course is a continuation of Sports Medicine I. This course provides advanced sports medicine students with instruction in advanced techniques and processes. This course will give students hands-on experience evaluating injuries commonly sustained by the competitive athlete. It includes all areas of sports medicine such as sports medicine terminology, musculoskeletal anatomy, evaluation, assessment, rehabilitation, and prevention of athletic injuries. Emphasis will be placed on evaluating and assessing athletic injuries. 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.

Sports Medicine Advanced Studies

Abbreviated Name: ***SPORTS MED AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***51.0913***

Prerequisite: Sports Medicine II

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Health Science

Abbreviated Name: ***WORK EXPER HEALTH*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0008***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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.

- LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY -

Criminal Justice I

Abbreviated Name: ***CRIMINAL JUST I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***43.0104***

Prerequisite: None

This course allows students to develop an understanding of the difference between the civil and criminal codes in the American legal system, with a particular emphasis on criminal and civil cases decided by Nevada courts by Nevada Revised Statutes. Students will explore themes in both civil and criminal law reflecting American social, moral, political and economic values. Students will focus on legal terminology and writing, and courtroom environment. Civil law will give an overview of tort, contract, bankruptcy, and administrative law. Students will focus on criminal law and the various aspects of behavior and actions of citizens, corporations and other associations deemed illegal by state and federal governments.

Criminal Justice II

Abbreviated Name: ***CRIMINAL JUST II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***43.0104***

Prerequisite: Criminal Justice I or Foundations of Public Safety

This course is a continuation of Criminal Justice I or Foundations of Public Safety. This course allows intermediate criminal justice students to develop their knowledge and skills. Areas of study will include civil law, criminal law, legal and ethical issues, forensics toxicology, laboratory technology, and research skills. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Criminal Justice III

Abbreviated Name: ***CRIMINAL JUST III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***43.0104***

Prerequisite: Criminal Justice II

This course is a continuation of Criminal Justice II. This course allows intermediate criminal justice students to develop their knowledge and skills learned in Criminal Justice II. Areas of study will include physical and scientific evidence preservation, interrogations, federal rules, and legalities involving arrests and search and seizure. 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.

Criminal Justice Advanced Studies

Abbreviated Name: ***CRIMINAL JUST AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***43.0104***

Prerequisite: Criminal Justice III

This course is offered to students who have achieved all content standards in a program whose desire is 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 Telecommunications I

Abbreviated Name: ***EMER TELECOMM I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***43.0399***

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

Abbreviated Name: ***EMER TELECOMM II*** *Credits:* ***1*** *Level:* ***L2C*** *CIP Code:* ***43.0399***

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 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

Abbreviated Name: ***EMER TELECOMM II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***43.0399***

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.

Entry Level Firefighting

Abbreviated Name: ***ENTRY LEVEL FIRE*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***43.0203***

Prerequisite: Fire Science II

This course is a continuation of Fire Science II. This course allows advanced fire science students to develop their knowledge and skills of advanced principles and procedures employed in fire services. Students will develop response procedures in order to respond to small and catastrophic emergency incidents. Areas of study include incident command systems, fire suppression tactics, EMS training, wildland firefighter Type-2 training, hazardous materials, and technical rescue awareness. 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.

Fire Science I

Abbreviated Name: ***FIRE SCI I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***43.0203***

Prerequisite: None

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 laws, ordinances, regulations 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

Abbreviated Name: ***FIRE SCI II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***43.0203***

Prerequisite: Fire Science I

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 and suppression, fire investigations, fire prevention, CPR/First Aid, engine companies, and 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

Abbreviated Name: ***FIRE SCI AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***43.0203***

Prerequisite: Entry Level Firefighting

This course is offered to students who have achieved all content standards in a program whose desire is 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 Photography

Abbreviated Name: ***FORENSIC PHOTO*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***43.0199***

Prerequisite: Forensic Science I or Foundations of Public Safety

This course will introduce students to the basic skills related to forensic photography. Areas of study include legal aspects, methods, techniques, and skills associated with crime scene analysis. This course will focus on the techniques and methods that are used with photographic evidence that is a fair and accurate representation of what is depicted at the crime scene. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Forensic Science I

Abbreviated Name: ***FORENSIC SCI I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***43.0106***

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 are 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

Abbreviated Name: ***FORENSIC SCI II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***43.0106***

Prerequisite: Forensic Science I or Foundations of Public Safety

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, examine of evidence, and fingerprinted processes. The appropriate use of technology and industry-standards equipment is an integral part of this course.

Forensic Science III

Abbreviated Name: ***FORENSIC SCI III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***43.0106***

Prerequisite: Forensic Science II

This course is a continuation of Forensic Science II. This course allows advanced forensic science students the opportunity to develop skills in courtroom proceedings and forensic specialties. Areas of study include legal proceedings, examination questioning, death investigations, anthropology, entomology and forensic psychology. Emphasis will be placed on criminal profiling, skeletal remains, pathology, and courtroom personnel. . The appropriate use of technology and industry-standards 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 employment.

Forensic Science Advanced Studies

Abbreviated Name: ***FORENSIC SCI AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***43.0106***

Prerequisite: Forensic Science III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Foundations of Public Safety

Abbreviated Name: ***FOUN PUBLIC SAFETY*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***43.9999***

Prerequisite: None

This course is designed as the foundation for a career pathway in Law, Public Safety, Corrections and Security. Students are introduced to the elements and principles of emergency and fire management services, law enforcement services, legal services, and security and protective services.

Law Enforcement I

Abbreviated Name: ***LAW ENFORCE I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***43.0107***

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 healthy wellness. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Law Enforcement II

Abbreviated Name: ***LAW ENFORCE II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***43.0107***

Prerequisite: Law Enforcement I or Foundations of Public Safety

This course is a continuation of Law Enforcement I or Foundations of Public Safety. 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, ethics, investigations, victimization, and introduction to the criminal justice system. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Law Enforcement III

Abbreviated Name: ***LAW ENFORCE III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***43.0107***

Prerequisite: Law Enforcement II

This course is a continuation of Law Enforcement II. This course provides advanced law enforcement students with instruction in advanced techniques and processes. Areas of study will include basic functions of a law enforcement officer such as written agency policies, quality control, procedural law, interrogations, use of force, and emergency management. 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

Abbreviated Name: ***LAW ENFORCE AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***43.0107***

Prerequisite: Law Enforcement III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Law Public Safety Corrections and Security

Abbreviated Name: ***WORK EXPER LAW*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0012***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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 & PUBLIC ADMINISTRATION -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Military Science I	MIL SCI I	L1	28.0503	1	N
Military Science II	MIL SCI II	L2	28.0503	1	N
Military Science III	MIL SCI III	L3	28.0503	1	N
Military Science IV	MIL SCI IV	L4C	28.0503	1	N

- HEALTH SCIENCE -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Biomedical I	BIOMED I	L1	26.0102	1	N
Biomedical II	BIOMED II	L2	26.0102	1	N
Biomedical III	BIOMED III	L3C	26.0102	1	N
Biomedical Advanced Studies	BIOMED AS	AS	26.0102	1	N
Community Health Science	CMTY HLTH SCI	L3C	51.2208	1	N
Community Health Science Advanced Studies	CMTY HLTH SCI AS	AS	51.2208	1	N
Dental Science I	DENTAL SCI I	L1	51.0601	1	M
Dental Science II	DENTAL SCI II	L2	51.0601	1	M
Dental Science III	DENTAL SCI III	L3C	51.0601	1	M
Dental Assisting Advanced Studies	DENTAL SCI AS	AS	51.0601	1	M
Emergency Medical Services	EMER MED SERVICES	L2	51.0810	1	N
Emergency Medical Technician	EMER MED TECH	L3C	51.0904	1	N
Emergency Medical Technician LAB	EMER MED TECH L	L3L	51.0904	1	N
Health Information Management I	HLTH INFO MGMT I	L2	51.0707	1	M
Health Information Management II	HLTH INFO MGMT II	L3C	51.0707	1	M
Health Information Management Advanced Studies	HLTH INFO MGMT AS	AS	51.0707	1	M
Health Professions	HLTH PROFESSIONS	L3	51.9999	1	N
Health Professions LAB	HLTH PROFESSIONS L	L3L	51.9999	1	N
Health Science I	HEALTH SCI I	L1	51.0000	1	N
Health Science II	HEALTH SCI II	L2	51.0000	1	N
Medical Assisting	MEDICAL ASST	L3C	51.0801	1	M
Medical Assisting LAB	MEDICAL ASST L	L3L	51.0801	1	M
Medical Assisting Advanced Studies	MEDICAL ASST AS	AS	51.0801	1	M
Medical Terminology	MEDICAL TERM	L2	51.0899	1	N
Nursing Assistant	NURSING ASST	L3C	51.3902	1	M
Nursing Assistant LAB	NURSING ASST L	L3L	51.3902	1	M
Pharmacy Practice	PHARMACY PRACT	L3C	51.0805	1	M
Pharmacy Practice Advanced Studies	PHARMACY PRACT AS	AS	51.0805	1	M

- HEALTH SCIENCE -
(CONTINUED)

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
PLTW-Biomedical Innovation	PLTW BIOMED INNOV	AS	26.0102	1	N
PLTW-Human Body Systems	PLTW HUM BODY SYS	L2	26.0102	1	N
PLTW-Medical Interventions	PLTW MED INTERVENT	L3C	26.0102	1	N
PLTW-Principles of Biomedical Sciences	PLTW PRIN BIOMED	L1	26.0102	1	N
Respiratory Science I	RESP SCI I	L1	51.0908	1	N
Respiratory Science II	RESP SCI II	L2	51.0908	1	N
Respiratory Science III	RESP SCI III	L3C	51.0908	1	N
Respiratory Science Advanced Studies	RESP SCI AS	AS	51.0908	1	N
Sports Medicine I	SPORTS MED I	L2	51.0913	1	N
Sports Medicine II	SPORTS MED II	L3C	51.0913	1	N
Sports Medicine Advanced Studies	SPORTS MED AS	AS	51.0913	1	N
Work Experience - Health Science	WORK EXPER HEALTH	WK	99.0008	1	N

- LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Criminal Justice I	CRIMINAL JUST I	L1	43.0104	1	F
Criminal Justice II	CRIMINAL JUST II	L2	43.0104	1	F
Criminal Justice III	CRIMINAL JUST III	L3C	43.0104	1	F
Criminal Justice Advanced Studies	CRIMINAL JUST AS	AS	43.0104	1	F
Emergency Telecommunications I	EMER TELECOMM I	L1	43.0399	1	N
Emergency Telecommunications II	EMER TELECOMM II	L2C	43.0399	1	N
Emergency Telecommunications II LAB	EMER TELECOMM II L	L2L	43.0399	1	N
Entry Level Firefighting	ENTRY LEVEL FIRE	L3C	43.0203	1	F
Fire Science I	FIRE SCI I	L1	43.0203	1	F
Fire Science II	FIRE SCI II	L2	43.0203	1	F
Fire Science Advanced Studies	FIRE SCI AS	AS	43.0203	1	F
Forensic Photography	FORENSIC PHOTO	L2	43.0199	1	N
Forensic Science I	FORENSIC SCI I	L1	43.0106	1	N
Forensic Science II	FORENSIC SCI II	L2	43.0106	1	N
Forensic Science III	FORENSIC SCI III	L3C	43.0106	1	N
Forensic Science Advanced Studies	FORENSIC SCI AS	AS	43.0106	1	N
Foundations of Public Safety	FOUN PUBLIC SAFETY	L1	43.9999	1	N
Law Enforcement I	LAW ENFORCE I	L1	43.0107	1	F
Law Enforcement II	LAW ENFORCE II	L2	43.0107	1	F
Law Enforcement III	LAW ENFORCE III	L3C	43.0107	1	F
Law Enforcement Advanced Studies	LAW ENFORCE AS	AS	43.0107	1	F
Work Experience – Law Public Safety Corrections and Security	WORK EXPER LAW	WK	99.0012	1	F

INFORMATION
&
MEDIA TECHNOLOGIES

CAREER CLUSTERS & PROGRAM ALIGNMENT

- ARTS, A/V TECHNOLOGY & COMMUNICATIONS -

- Fashion, Textiles & Design
- Graphic Design
- Interior Design
- Photography
- Radio Production
- Theatre Technology
- Video Production

- INFORMATION TECHNOLOGY -

- Animation
- Computer Science
- Cybersecurity
- Digital Game Development
- IT – Networking
- IT – Service and Support
- Web Design and Development

INFORMATION & MEDIA TECHNOLOGIES

PROGRAM COURSE SEQUENCES

- ARTS, A/V TECHNOLOGY & COMMUNICATIONS -

Program Name	Course Sequence	State Skill Standards*
Fashion, Textiles and Design	**Core Course Sequence** Fashion Design and Construction I Fashion Design and Construction II Fashion Design and Construction III **Complementary Course(s)** Pattern Drafting Fashion Design and Construction Advanced Studies	Fashion, Textiles and Design
Graphic Design	**Core Course Sequence** Graphic Design I Graphic Design II Graphic Design III **Complementary Course(s)** Graphic Design II LAB ** Graphic Design III LAB ** Graphic Design Advanced Studies	Graphic Design
Interior Design	**Core Course Sequence** Interior Design I Interior Design II Interior Design III **Complementary Course(s)** Interior Design II LAB ** Interior Design III LAB ** Interior Design Advanced Studies	Interior Design
Photography	**Core Course Sequence** Photography I Photography II Photography III **Complementary Course(s)** Photography Advanced Studies	Photography
Radio Production	**Core Course Sequence** Radio Production I Radio Production II Radio Production III **Complementary Course(s)** Radio Production Advanced Studies	Radio Production
Theatre Technology	**Core Course Sequence** Theatre Technology I Theatre Technology II Theatre Technology III **Complementary Course(s)** Theatre Technology Advanced Studies	Theatre Technology

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

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

- ARTS, A/V TECHNOLOGY & COMMUNICATIONS - (CONTINUED)

Program Name	Course Sequence	State Skill Standards*
Video Production	**Core Course Sequence** Video Production I Video Production II Video Production III **Complementary Course(s)** Video Production II LAB ** Video Production III LAB ** Video Production Advanced Studies	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 level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.

- INFORMATION TECHNOLOGY -

Program Name	Course Sequence	State Skill Standards*
Animation	**Core Course Sequence** Animation I Animation II Animation III **Complementary Course(s)** Animation II LAB ** Animation III LAB ** Animation Advanced Studies	Animation
Computer Science	**Core Course Sequence** Computer Science I Computer Science II - *or* - AP Computer Science Principles Computer Science III - *or* - AP Computer Science A **Complementary Course(s)** Computer Science II LAB ** Computer Science III LAB ** Computer Science Advanced Studies	Computer Science
Cybersecurity	**Core Course Sequence** Cybersecurity I Cybersecurity II Cybersecurity III **Complementary Course(s)** Cybersecurity II LAB ** Cybersecurity III LAB ** Cybersecurity Advanced Studies	Cybersecurity *TBD*
Digital Game Development	**Core Course Sequence** Digital Game Development I Digital Game Development II Digital Game Development III **Complementary Course(s)** Digital Game Development II LAB ** Digital Game Development III LAB ** Digital Game Development Advanced Studies	Digital Game 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 level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.

- INFORMATION TECHNOLOGY -
(CONTINUED)

Program Name	Course Sequence	State Skill Standards*
Information Technology Networking	**Core Course Sequence** IT Networking I IT Networking II IT Networking III **Complementary Course(s)** IT Networking Advanced Studies	Information Technology Networking
Cisco Networking Academy	**Core Course Sequence** Cisco IT Essentials/Intro to Cybersecurity CCNA I Introduction to Networking CCNA II Routing and Switching Essentials **Complementary Course(s)** IT Networking Advanced Studies	Information Technology Networking
Information Technology Service and Support	**Core Course Sequence** IT Essentials I IT Essentials II **Complementary Course(s)** IT Essentials Advanced Studies	Information Technology Service and Support
National Academy Foundation Academy of Information Technology	**Core Course Sequence** NAF-Graphic Design / NAF-Web Design NAF-Principles of IT / NAF-Principles of IT-IC3 - *or* - AP Computer Science Principles NAF-Computer Networking / NAF-Computer Systems **Complementary Course(s)** NAF-Database Design NAF-Digital Video Production NAF-Introduction to Programing	Information Technology Service and Support
Web Design and Development	**Core Course Sequence** Web Design and Development I Web Design and Development II Web Design and Development III **Complementary Course(s)** Web Design and Development II LAB ** Web Design and Development III LAB ** Web Design and Development Advanced Studies	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 level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.

COURSE DESCRIPTIONS

- ARTS, A/V TECHNOLOGY & COMMUNICATIONS -

Fashion Design and Construction I

Abbreviated Name: ***FASHION CONST I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***50.0407***

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

Abbreviated Name: ***FASHION CONST II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***50.0407***

Prerequisite: Fashion Design and Construction I

This course is a continuation of Fashion, Design, and Construction I. This course allows intermediate students to build on fundamental skills developed in Fashion, Design, and Construction I. This course will provide more in-depth experiences with fashion, textiles, design and construction. Areas of emphasis are comprised of design and illustration, performance characteristics of textile components, commercial production processes, and merchandising, marketing and customer service concepts. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Fashion Design and Construction III

Abbreviated Name: ***FASHION CONST III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***50.0407***

Prerequisite: Fashion Design and Construction II

This course is a continuation of Fashion, Design, and Construction II. This course allows advanced students to develop their knowledge and skills attained in Fashion, Design, and Construction I and II. This course will cover in greater depth design inspiration, vision and skills, professional portfolio development, advanced techniques such as draping, presentation skills, manufacturing, the merchandising-buying process, promotion, as well as legislation, consumer protection, business operations and entrepreneurship. 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 Advanced Studies

Abbreviated Name: ***FASHION CONST AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***50.0407***

Prerequisite: Fashion Design and Construction III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Graphic Design I

Abbreviated Name: ***GRAPHIC DESG I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***50.0409***

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

Abbreviated Name: ***GRAPHIC DESG II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***50.0409***

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, and web applications. Students will develop their skills utilizing industry-standard software and equipment. Portfolio development will be emphasized. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Graphic Design II LAB

Abbreviated Name: ***GRAPHIC DESG II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***50.0409***

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 III

Abbreviated Name: ***GRAPHIC DESG III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***50.0409***

Prerequisite: Graphic Design II

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 III LAB

Abbreviated Name: ***GRAPHIC DESG III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***50.0409***

Prerequisite: Concurrent enrollment in Graphic Design III

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

Abbreviated Name: ***GRAPHIC DESG AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***50.0409***

Prerequisite: Graphic Design III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Interior Design I

Abbreviated Name: ***INT DESIGN I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***50.0408***

Prerequisite: None

This course provides students with an introduction to residential design. Students learn about the elements and principals of design and how to apply them in the planning of interior spaces. Areas of study include understanding both personal and clients wants and needs, housing options, design styles, architectural styles, introduction to architectural drawings, and career opportunities in the field of interior design.

Interior Design II

Abbreviated Name: ***INT DESIGN II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***50.0408***

Prerequisite: Interior Design I

This course is a continuation of Interior Design I. This course prepares intermediate interior design students for instruction in interior spaces and in determining client interests and developing a design plan. Areas of study include styles and trends in architecture, the basic structure of construction, and residential and commercial interior designs. Students will expand their design knowledge in color, textiles, materials, furnishings, accessories, and completing and presenting design professional presentations. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Interior Design II LAB

Abbreviated Name: ***INT DESIGN II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***50.0408***

Prerequisite: Concurrent enrollment in Interior 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 this program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Interior Design III

Abbreviated Name: ***INT DESIGN III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***50.0408***

Prerequisite: Interior Design II

This course is a continuation of Interior Design II. This course provides advanced interior design students with instruction in advanced techniques and processes, understanding of the elements and principles of design, processes for producing design concepts, and creating visuals and samples for professional presentations. 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.

Interior Design III LAB

Abbreviated Name: ***INT DESIGN III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***50.0408***

Prerequisite: Concurrent enrollment in Interior Design III

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.

Interior Design Advanced Studies

Abbreviated Name: ***INT DESIGN AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***50.0408***

Prerequisite: Interior Design III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Pattern Drafting

Abbreviated Name: ***PAT DRAFTING*** *Credits:* ***1*** *Level:* ***L3*** *CIP Code:* ***50.0407***

Prerequisite: Fashion Design and Construction II

This course is designed to provide students with the theory and application of flat pattern drafting and design. Students apply the principles and elements of design to draft patterns and construct garments. Areas of emphasis include sketching, measurements, and pattern alterations. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Photography I

Abbreviated Name: ***PHOTO I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***50.0406***

Prerequisite: None

This course is designed to introduce students to the fundamentals of commercial photography in relation to seeing photographically, operating cameras, use of light, image capture, and processing digital images. Students will also learn the history of photography, legal and ethical issues related to the industry. Career exploration is also a part of this course.

Photography II

Abbreviated Name: ***PHOTO II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***50.0406***

Prerequisite: Photography I

This course is a continuation of Photography I. This course provides intermediate photography students with instruction in advanced digital techniques and processes. Areas of study include operating cameras, use of light, image capture, and processing digital images. Students will also learn the history of photography, legal and ethical issues related to the industry. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Photography III

Abbreviated Name: ***PHOTO III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***50.0406***

Prerequisite: Photography II

This course is a continuation of Photography II. This course provides advanced photography students with instruction in advanced digital techniques and processes in commercial photography. Manipulation of images using industry-standard software is also included. Students will be required to exhibit their projects. Students will be prepared for industry certifications. 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.

Photography Advanced Studies

Abbreviated Name: ***PHOTO AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***50.0406***

Prerequisite: Photography III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Radio Production I

Abbreviated Name: ***RADIO PROD I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***10.0202***

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

Abbreviated Name: ***RADIO PROD II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***10.0202***

Prerequisite: Radio Production I

This course is a continuation of Radio Production I. Intermediate radio production students will receive instruction in techniques for broadcast news writing, gathering and incorporating sound, and production operations. Emphasis is placed on principles to produce a live broadcast, pre/post-production, editing techniques, studio, and engineering procedures, and production skills. An application of laws and ethics within the broadcast industry is included. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Radio Production III

Abbreviated Name: ***RADIO PROD III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***10.0202***

Prerequisite: Radio Production II

This course is a continuation of Radio Production II. 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. 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

Abbreviated Name: ***RADIO PROD AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***10.0202***

Prerequisite: Radio Production III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Theatre Technology I

Abbreviated Name: ***THEATRE TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***50.0502***

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, theater safety, set construction, stage lighting, sound, and various roles in theatre.

Theatre Technology II

Abbreviated Name: ***THEATRE TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***50.0502***

Prerequisite: Theatre Technology I

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

Theatre Technology III

Abbreviated Name: ***THEATRE TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***50.0502***

Prerequisite: Theatre Technology II

This course is a continuation of Theatre Technology II. This course provides advanced theater design technology students with instruction in advanced techniques and processes. Areas of study include implementation of lighting, sound and scenic design and house management. Exploration of career opportunities in theatre technology is also 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.

Theatre Technology Advanced Studies

Abbreviated Name: ***THEATRE TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***50.0502***

Prerequisite: Theatre Technology III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Video Production I

Abbreviated Name: ***VIDEO PROD I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***50.0602***

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

Abbreviated Name: ***VIDEO PROD II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***50.0602***

Prerequisite: Video Production I

This course is a continuation of Video Production I. This course provides intermediate video production students with instruction in advanced techniques and processes. Emphasis is placed on the advanced principles in pre/post-production, editing techniques, studio and engineering procedures, and live broadcast skills. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Video Production II LAB

Abbreviated Name: ***VIDEO PROD II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***50.0602***

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 III

Abbreviated Name: ***VIDEO PROD III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***50.0602***

Prerequisite: Video Production II

This course is a continuation of Video Production II. This course provides advanced video production students with instruction in advanced techniques and processes. Emphasis is placed on the advanced principles in pre/post-production, 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 and be prepared for postsecondary education.

Video Production III LAB

Abbreviated Name: ***VIDEO PROD III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***50.0602***

Prerequisite: Concurrent enrollment in Video Production III

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

Abbreviated Name: ***VIDEO PROD AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***50.0602***

Prerequisite: Video Production III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Arts A/V Technology and Communication

Abbreviated Name: ***WORK EXPER TECH*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0003***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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.

- INFORMATION TECHNOLOGY -

Animation I

Abbreviated Name: ***ANIMATE I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***10.0304***

Prerequisite: None

This course introduces students to the basic principles of two and three-dimensional computer animation and graphics. Areas of study include storyboarding, character creation, background development, traditional animation techniques, and the use of industry-standard technology. Projects are provided to develop the student's career-based animation skills.

Animation II

Abbreviated Name: ***ANIMATE II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***10.0304***

Prerequisite: Animation I

This course is a continuation of Animation I. This course provides students further instruction in principles of two and three-dimensional computer animation and graphics. Areas of study include storyboarding, character creation, modeling, background development, and traditional animation techniques. Projects are provided to develop the student's career-based animation skills. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Animation II LAB

Abbreviated Name: ***ANIMATE II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***10.0304***

Prerequisite: Concurrent enrollment in Animation 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.

Animation III

Abbreviated Name: ***ANIMATE III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***10.0304***

Prerequisite: Animation II

This course is a continuation of Animation II. This course provides students advanced instruction in principles of two and three-dimensional computer animation and graphics. Areas of study include storyboarding, character creation, modeling, background development, and traditional animation techniques. Projects are provided to develop the student's career-based animation 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.

Animation III LAB

Abbreviated Name: ***ANIMATE III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***10.0304***

Prerequisite: Concurrent enrollment in Animation III

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.

Animation Advanced Studies

Abbreviated Name: ***ANIMATE AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***10.0304***

Prerequisite: Animation III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

AP Computer Science A

Abbreviated Name: ***AP COMPUTER SCI A*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***11.0701***

Prerequisite: Computer Science II or AP Computer Science Principles

This course follows The College Board Advanced Placement 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.

AP Computer Science Principles

Abbreviated Name: ***AP COMP SCI PRIN*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***11.0701***

Prerequisite: Computer Science I

This course follows The College Board Advanced Placement curriculum and prepares students for the AP Computer Science Principles exam. This course will introduce students to the essential ideas of computer science and show how computing and technology can influence the world. This course focuses on technology and programing as a means to solve computational problems and find creative solutions. Students will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life. The appropriate use of technology and industry-standard equipment is an integral part of this course.

CISCO-IT Essentials

Abbreviated Name: ***CISCO IT ESST*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***11.1002***

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

Abbreviated Name: ***CISCO IT CYBR*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***11.1002***

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

Abbreviated Name: ***CISCO CCNA I*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***11.1002***

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

Abbreviated Name: ***CISCO CCNA II*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***11.1002***

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.

Computer Science I

Abbreviated Name: ***COMPUTER SCI I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***11.0701***

Prerequisite: None

This course is designed to introduce students to programming and the role of the computer in society. The areas of major emphasis in the course will be on object-oriented programming methodology, algorithms, data structures and ethics. Topics will include program design, program implementation, standard data structures, standard algorithms and an introduction to C++ language.

Computer Science II

Abbreviated Name: ***COMPUTER SCI II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***11.0701***

Prerequisite: Computer Science I

This course is a continuation of Computer Science I. This course provides intermediate computer science students with instruction in advanced techniques and processes, particularly as it relates to the language of C++. The areas of major emphasis in the course will be on object-oriented programming methodology, algorithms, data structures and ethics. Topics will include program design, program implementation, standard data structures, and standard algorithms. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Computer Science II LAB

Abbreviated Name: ***COMPUTER SCI II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***11.0701***

Prerequisite: Concurrent enrollment in Computer Science 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.

Computer Science III

Abbreviated Name: ***COMPUTER SCI III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***11.0701***

Prerequisite: Computer Science II

This course is a continuation of Computer Science II. This course provides advanced computer science students with instruction in advanced programming, techniques and processes, with an emphasis in the language of Java. The students will continue to develop all skills learned in Computer Science I and II. 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.

Computer Science III LAB

Abbreviated Name: ***COMPUTER SCI III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***11.0701***

Prerequisite: Concurrent enrollment in Computer Science III

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.

Computer Science Advanced Studies

Abbreviated Name: ***COMPUTER SCI AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***11.0701***

Prerequisite: Computer Science III or AP Computer Science Principles

This course is offered to students who have achieved all content standards in a program whose desire is 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

Abbreviated Name: ***CYBRSECU I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***52.2101***

Prerequisite: None

This course covers the fundamentals of computer hardware and software, as well as topics in design, maintenance, and repair. Students who complete this course will be able to describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software. This course prepares students for CompTIA's A+ industry certification.

Cybersecurity II

Abbreviated Name: ***CYBRSECU II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***52.2101***

Prerequisite: Cybersecurity I

This course is a continuation of Cybersecurity I. This course provides intermediate cybersecurity students with computer forensics and incident handling. 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 III

Abbreviated Name: ***CYBRSECU III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***52.2101***

Prerequisite: Cybersecurity II

This course is a continuation of Cybersecurity II. This course provides advanced cybersecurity students with the general theory of switching and routing, including virtual local-area networks (VLAN), interVLAN routing, wireless local area networks (LAN), and network troubleshooting. Upon successful completion of this course, students will be prepared for CompTIA's Networking + certification exams. 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.

Cybersecurity Advanced Studies

Abbreviated Name: ***CYBRSECU AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***52.2101***

Prerequisite: Cybersecurity III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Digital Game Development I

Abbreviated Name: ***DIG GAME DEV I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***50.0411***

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

Abbreviated Name: ***DIG GAME DEV II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***50.0411***

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

Abbreviated Name: ***DIG GAME DEV II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***50.0411***

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 III

Abbreviated Name: ***DIG GAME DEV III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***50.0411***

Prerequisite: Digital Game Development II

This course is a continuation of Digital Game Development II. This course provides advanced digital game development students with instruction in advanced techniques and production processes, various pay models and considerations to market a game. Emphasis is placed on students developing digital games that include intermediate and advanced concepts in design, programming, animation, and 3-D techniques. Project-based learning, collaboration, and portfolio development are essential elements of 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.

Digital Game Development III LAB

Abbreviated Name: ***DIG GAME DEV III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***50.0411***

Prerequisite: Concurrent enrollment in Digital Game Development III

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

Abbreviated Name: ***DIG GAME DEV AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***50.0411***

Prerequisite: Digital Game Development III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

IT Essentials I

Abbreviated Name: ***IT ESST I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***15.1202***

Prerequisite: None

This course covers the fundamentals of computer hardware and software, as well as topics in design, maintenance, and repair. Students who complete this course will be able to describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software. This course prepares students for industry certification such as CompTIA's A+.

IT Essentials II

Abbreviated Name: ***IT ESST II*** *Credits:* ***1*** *Level:* ***L2C*** *CIP Code:* ***15.1202***

Prerequisite: IT Essentials I

This course covers the fundamentals of computer hardware and software, as well as topics in design, maintenance, and repair. Students who complete this course will be able to describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software. This course prepares students for industry certification such as CompTIA's A+. 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.

IT Essentials Advanced Studies

Abbreviated Name: ***IT ESST AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***15.1202***

Prerequisite: IT Essentials II

This course is offered to students who have achieved all content standards in a program whose desire is 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.

IT Networking I

Abbreviated Name: ***IT NETWRKG I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***11.1002***

Prerequisite: None

This course will introduce students to the general theories needed to design, build, and maintain home and small business networks. Concepts learned will provide the students with the opportunity to further their education in Information Technology (IT) and prepare for entry-level IT careers.

IT Networking II

Abbreviated Name: ***IT NETWRKG II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***11.1002***

Prerequisite: IT Networking I

This course is a continuation of IT Networking I. This course provides intermediate students with the general theory of distance vector routing protocols and skills required for advanced router configuration, including interfaces, Routing Information Protocol (RIP) and Enhanced Interior Gateway Routing Protocol (EIGRP). Concepts learned will provide the students with the opportunity to further their education in Information Technology (IT) and prepare for entry-level IT careers. Upon completion of this sequence of courses, students may qualify to sit for a national industry-standard certification exam.

IT Networking III

Abbreviated Name: ***IT NETWRKG III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***11.1002***

Prerequisite: IT Networking II

This course is a continuation of IT Networking II. This course provides intermediate students with the general theory of switching and intermediate routing, including virtual local-area networks (VLAN), interVLAN routing, wireless local area networks (LAN), and network troubleshooting. Concepts learned will provide the students with the opportunity to further their education in Information Technology (IT) and prepare for entry-level IT careers. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

IT Networking Advanced Studies

Abbreviated Name: ***IT NETWRKG AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***11.1002***

Prerequisite: IT Networking III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

NAF-Computer Networking

Abbreviated Name: ***NAF COMP NETWORK*** *Credits:* ***.5*** *Level:* ***L3C*** *CIP Code:* ***11.1002***

Prerequisite: Must complete two or more Level 2 (L2) NAF courses or AP Computer Science Principles

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Computer Networking is a hands-on introduction to peer-to-peer and client/server networks. The course guides students through all phases of implementing and troubleshooting common TCP/IP Ethernet networks. It covers network components, cables, and connectors, as well as the OSI model, protocols, and topologies. Students implement and troubleshoot a LAN and learn about access issues for WANs. Finally, students explore opportunities for network-related careers.

NAF-Computer Systems

Abbreviated Name: ***NAF COMP SYSTEMS*** *Credits:* ***.5*** *Level:* ***L3C*** *CIP Code:* ***11.0701***

Prerequisite: Must complete two or more Level 2 (L2) NAF courses or AP Computer Science Principles

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Computer Systems walks students through the intricacies of setting up hardware, installing software, connecting to a network, and connecting to the Internet. Students get hands-on practice upgrading operating systems. They get practice assembling and disassembling computer hardware including peripherals, motherboards, FRUs, and connectors. Students also learn troubleshooting techniques. Finally, students get a chance to explore careers for computer systems professionals.

NAF-Database Design

Abbreviated Name: ***NAF DBASE DESG*** *Credits:* ***.5*** *Level:* ***L3*** *CIP Code:* ***11.0802***

Prerequisite: Must complete two or more Level 2 (L2) NAF courses or AP Computer Science Principles

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Database Design covers all aspects of the database life cycle, from collecting user requirements to delivering a database application. Students get hands-on practice in a true-to-life database project as they move from a statement of requirements to a conceptual model, then to an entity-relationship model. They translate this into a relational database. Finally, they create, test, and document the associated database application. Students also examine career opportunities as database professionals.

NAF-Digital Video Production

Abbreviated Name: ***NAF DIG VIDEO PROD*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***50.0602***

Prerequisite: None

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Digital Video Production provides a hands-on introduction to digital video production. It guides students through all phases of digital video production, from planning, executing, and managing a video shoot to editing footage. Students explore methods of sharing and broadcasting digital videos, including platform versions, CDs/DVDs, and web delivery. They also learn about publicizing a digital video, using techniques such as search engines to direct viewers to the production.

NAF-Graphic Design

Abbreviated Name: ***NAF GRAPHIC DESIGN*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***50.0409***

Prerequisite: None

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Graphic Design provides a hands-on introduction to the technical and creative skills of a professional graphic designer. First students learn the distinguishing features of communicating visually through graphic design. Next, they gain technical skills in Adobe Photoshop to equip them for graphic design work. From there, students master the basic principles of graphic design, and then delve into the elements of graphic design, such as color, typography, and images.

NAF-Introduction to Programming

Abbreviated Name: ***NAF INTRO PROG*** *Credits:* ***.5*** *Level:* ***L3*** *CIP Code:* ***11.0201***

Prerequisite: Must complete two or more Level 2 (L2) NAF courses or AP Computer Science Principles

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Introduction to Programming uses Python as a basis for learning general programming skills. Students learn programming principles by comparing Python to other programming languages. They use models as a way to quickly solve new problems using knowledge and techniques already learned. Students complete over 60 programs in the course, including both text and graphics/animation programs. In addition to programming, students learn program design, documentation, formal debugging, and testing. Finally, students examine career opportunities in programming.

NAF-Principles of Information Technology

Abbreviated Name: ***NAF PRIN IT*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***15.1201***

Prerequisite: Must complete two or more Level 1 (L1) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

This is the first course students take in the Academy of Information Technology. It provides an overview of information technology and introduces students to the basics of hardware and software. Students examine hardware components including peripherals, connectors, and memory. Students explore common operating systems, software applications, and programming languages. Students learn about types of networks and network topology, and they set up an email client/server connection.

NAF-Principles of Information Technology IC3

Abbreviated Name: ***NAF PRIN IT IC3*** *Credits:* ***.5*** *Level:* ***L2*** *CIP Code:* ***15.1201***

Prerequisite: Must complete two or more Level 1 (L1) NAF courses

Schools must be affiliated with the National Academy Foundation™ program to offer this course

The IC3 Certification Extension is a second-semester extension to the NAF course Principles of Information Technology. The purpose of this course extension is to prepare students to pass the IC3 Certification exam. It is geared to the Global Standard 3 (August, 2009) version of the IC3 exam, which includes Computing Fundamentals, Key Applications, and Living Online. This course extension assumes that students have successfully completed Principles of Information Technology.

NAF-Web Design

Abbreviated Name: ***NAF WEB DESG*** *Credits:* ***.5*** *Level:* ***L1*** *CIP Code:* ***11.0801***

Prerequisite: None

Schools must be affiliated with the National Academy Foundation™ program to offer this course

Web Design is a hands-on introduction to designing, building, and launching Web sites. Students learn about Web development including HTML coding, usability, design, and Web-based publishing tools. Students determine business requirements, gather Web content, create Web pages, conduct usability testing, launch their Web sites, and plan how to attract traffic. Finally, students take a look at various career opportunities in Web design.

Web Design and Development I

Abbreviated Name: ***WEB DESG DEV I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***11.0801***

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, typography and message using industry-standard software. Students are introduced to various web design languages, design concepts, and layout theory. Students will become familiar with marketing and other uses of websites; as well as ethical and legal issues related to websites.

Web Design and Development II

Abbreviated Name: ***WEB DESG DEV II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***11.0801***

Prerequisite: Web Design and Development I

This course is a continuation of Web Design and Development I. This course is designed for intermediate students to create websites for a variety of purposes. Students will develop their knowledge of content, placement, use of color and graphics, typography and message. Students will use various web design languages, design concepts, and layout theories to create their websites. Students will examine the role of marketing, market research, ethics and legal issues as it relates to websites. 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.

Web Design and Development II LAB

Abbreviated Name: ***WEB DESG DEV II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***11.0801***

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 III

Abbreviated Name: ***WEB DESG DEV III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***11.0801***

Prerequisite: Web Design and Development II

This course is a continuation of Web Design and Development II. 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, animation and interactivity in websites, as well as, web servers and a more extensive knowledge of website construction. 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 III LAB

Abbreviated Name: ***WEB DESG DEV III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***11.0801***

Prerequisite: Concurrent enrollment in Web Design and Development III

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

Abbreviated Name: ***WEB DESG DEV AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***11.0801***

Prerequisite: Web Design and Development III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Information Technology

Abbreviated Name: ***WORK EXPER IT*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0011***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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 & COMMUNICATIONS -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Fashion Design and Construction I	FASHION CONST I	L1	50.0407	1	N
Fashion Design and Construction II	FASHION CONST II	L2	50.0407	1	N
Fashion Design and Construction III	FASHION CONST III	L3C	50.0407	1	N
Fashion Design and Construction Advanced Studies	FASHION CONST AS	AS	50.0407	1	N
Graphic Design I	GRAPHIC DESG I	L1	50.0409	1	N
Graphic Design II	GRAPHIC DESG II	L2	50.0409	1	N
Graphic Design II LAB	GRAPHIC DESG II L	L2L	50.0409	1	N
Graphic Design III	GRAPHIC DESG III	L3C	50.0409	1	N
Graphic Design III LAB	GRAPHIC DESG III L	L3L	50.0409	1	N
Graphic Design Advanced Studies	GRAPHIC DESG AS	AS	50.0409	1	N
Interior Design I	INT DESIGN I	L1	50.0408	1	N
Interior Design II	INT DESIGN II	L2	50.0408	1	N
Interior Design II LAB	INT DESIGN II L	L2L	50.0408	1	N
Interior Design III	INT DESIGN III	L3C	50.0408	1	N
Interior Design III LAB	INT DESIGN III L	L3L	50.0408	1	N
Interior Design Advanced Studies	INT DESIGN AS	AS	50.0408	1	N
Pattern Drafting	PAT DRAFTING	L3	50.0407	1	N
Photography I	PHOTO I	L1	50.0406	1	N
Photography II	PHOTO II	L2	50.0406	1	N
Photography III	PHOTO III	L3C	50.0406	1	N
Photography Advanced Studies	PHOTO AS	AS	50.0406	1	N
Radio Production I	RADIO PROD I	L1	10.0202	1	F
Radio Production II	RADIO PROD II	L2	10.0202	1	F
Radio Production III	RADIO PROD III	L3C	10.0202	1	F
Radio Production Advanced Studies	RADIO PROD AS	AS	10.0202	1	F
Theatre Technology I	THEATRE TECH I	L1	50.0502	1	N
Theatre Technology II	THEATRE TECH II	L2	50.0502	1	N
Theatre Technology III	THEATRE TECH III	L3C	50.0502	1	N
Theatre Technology Advanced Studies	THEATRE TECH AS	AS	50.0502	1	N
Video Production I	VIDEO PROD I	L1	50.0602	1	F
Video Production II	VIDEO PROD II	L2	50.0602	1	F
Video Production II LAB	VIDEO PROD II L	L2L	50.0602	1	F
Video Production III	VIDEO PROD III	L3C	50.0602	1	F
Video Production III LAB	VIDEO PROD III L	L3L	50.0602	1	F
Video Production Advanced Studies	VIDEO PROD AS	AS	50.0602	1	F
Work Experience - Arts A/V Technology and Communication	WORK EXPER TECH	WK	99.0003	1	N

- INFORMATION TECHNOLOGY -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Animation I	ANIMATE I	L1	10.0304	1	N
Animation II	ANIMATE II	L2	10.0304	1	N
Animation II LAB	ANIMATE II L	L2L	10.0304	1	N
Animation III	ANIMATE III	L3C	10.0304	1	N
Animation III LAB	ANIMATE III L	L3L	10.0304	1	N
Animation Advanced Studies	ANIMATE AS	AS	10.0304	1	N
AP Computer Science A	AP COMPUTER SCI A	L3C	11.0701	1	N
AP Computer Science Principles	AP COMP SCI PRIN	L2	11.0701	1	N
Cisco IT Essentials	CISCO IT ESST	L1	11.1002	.5	N
Cisco Introduction to Cybersecurity	CISCO IT CYBR	L1	11.1002	.5	N
CCNA I Introduction to Networking	CISCO CCNA I	L2	11.1002	1	N
CCNA II Routing and Switching Essentials	CISCO CCNA II	L3C	11.1002	1	N
Computer Science I	COMPUTER SCI I	L1	11.0701	1	N
Computer Science II	COMPUTER SCI II	L2	11.0701	1	N
Computer Science II LAB	COMPUTER SCI II L	L2L	11.0701	1	N
Computer Science III	COMPUTER SCI III	L3C	11.0701	1	N
Computer Science III LAB	COMPUTER SCI III L	L3L	11.0701	1	N
Computer Science Advanced Studies	COMPUTER SCI AS	AS	11.0701	1	N
Cybersecurity I	CYBRSECU I	L1	52.2101	1	N
Cybersecurity II	CYBRSECU II	L2	52.2101	1	N
Cybersecurity III	CYBRSECU III	L3C	52.2101	1	N
Cybersecurity Advanced Studies	CYBRSECU AS	AS	52.2101	1	N
Digital Game Development I	DIG GAME DEV I	L1	50.0411	1	N
Digital Game Development II	DIG GAME DEV II	L2	50.0411	1	N
Digital Game Development II LAB	DIG GAME DEV II L	L2L	50.0411	1	N
Digital Game Development III	DIG GAME DEV III	L3C	50.0411	1	N
Digital Game Development III LAB	DIG GAME DEV III L	L3L	50.0411	1	N
Digital Game Development Advanced Studies	DIG GAME DEV AS	AS	50.0411	1	N
IT Essentials I	IT ESST I	L1	15.1202	1	F
IT Essentials II	IT ESST II	L2C	15.1202	1	F
IT Essentials Advanced Studies	IT ESST AS	AS	15.1202	1	F
IT Networking I	IT NETWRKG I	L1	11.1002	1	F
IT Networking II	IT NETWRKG II	L2	11.1002	1	F
IT Networking III	IT NETWRKG III	L3C	11.1002	1	F
IT Networking Advanced Studies	IT NETWRKG AS	AS	11.1002	1	F

- INFORMATION TECHNOLOGY -
(CONTINUED)

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
NAF-Computer Networking	NAF COMP NETWORK	L3C	11.1002	0.5	F
NAF-Computer Systems	NAF COMP SYSTEMS	L3C	11.0701	0.5	N
NAF-Database Design	NAF DBASE DESG	L3	11.0802	0.5	N
NAF-Digital Video Production	NAF DIG VIDEO PROD	L1	50.0602	0.5	F
NAF-Graphic Design	NAF GRAPHIC DESIGN	L1	50.0409	0.5	N
NAF-Introduction to Programming	NAF INTRO PROG	L3	11.0201	0.5	F
NAF-Principles of Information Technology	NAF PRIN IT	L2	15.1201	0.5	F
NAF-Principles of Information Technology IC3	NAF PRIN IT IC3	L2	15.1201	0.5	F
NAF-Web Design	NAF WEB DESG	L1	11.0801	0.5	N
Web Design and Development I	WEB DESG DEV I	L1	11.0801	1	N
Web Design and Development II	WEB DESG DEV II	L2	11.0801	1	N
Web Design and Development III	WEB DESG DEV III	L3C	11.0801	1	N
Web Design and Development III LAB	WEB DESG DEV III L	L3L	11.0801	1	N
Web Design and Development Advanced Studies	WEB DESG DEV AS	AS	11.0801	1	N
Work Experience – Information Technology	WORK EXPER IT	WK	99.0011	1	N

SKILLED
&
TECHNICAL SCIENCES

CAREER CLUSTERS & PROGRAM ALIGNMENT

- ARCHITECTURE & CONSTRUCTION -

- Architectural Design
- Construction Technology
- Drafting & Design
- Furniture & Cabinetmaking

- MANUFACTURING -

- Automation Technology
- Electronic Technology
- Manufacturing Technologies
- Mechanical Technology
- Metalworking
- Welding Technology

- SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS -

- Energy Technologies
- Aerospace Engineering
- Architectural & Civil Engineering
- Environmental Engineering
- Electrical Engineering
- Mechanical Engineering

- TRANSPORTATION, DISTRIBUTION & LOGISTICS -

- Automotive Service Technician
- Automotive Technology
- Aviation Maintenance Technician
- Aviation Technology
- Collision Repair Technology
- Diesel Technology

SKILLED & TECHNICAL SCIENCES

PROGRAM COURSE SEQUENCES

- ARCHITECTURE & CONSTRUCTION -

Program Name	Course Sequence	State Skill Standards*
Architectural Design	**Core Course Sequence** Architectural Design I Architectural Design II Architectural Design III **Complementary Course(s)** Architectural Design II LAB Architectural Design III LAB Architectural Design Advanced Studies	Architectural Design
Construction Technology	**Core Course Sequence** Construction Technology I Construction Technology II Construction Technology III **Complementary Course(s)** Construction Technology II LAB ** Construction Technology III LAB ** Construction Technology Advanced Studies	Construction Technology
Drafting and Design	**Core Course Sequence** Drafting and Design I Drafting and Design II Drafting and Design III **Complementary Course(s)** Drafting and Design II LAB ** Drafting and Design III LAB ** Drafting and Design Advanced Studies	Drafting and Design
Furniture and Cabinetmaking	**Core Course Sequence** Furniture and Cabinetmaking I Furniture and Cabinetmaking II Furniture and Cabinetmaking III **Complementary Course(s)** Furniture and Cabinetmaking Advanced Studies	Furniture and Cabinetmaking

* 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.

- MANUFACTURING -

Program Name	Course Sequence	State Skill Standards*
Automation Technology	**Core Course Sequence** Automation Technology I Automation Technology II Automation Technology III **Complementary Course(s)** Automation Technology Advanced Studies	Automation Technology *TBD*
Electronic Technology	**Core Course Sequence** Electronic Technology I Electronic Technology II Electronic Technology III **Complementary Course(s)** Electronic Technology II LAB ** Electronic Technology III LAB ** Electronic Technology Advanced Studies	Electronic Technology
Manufacturing Technologies	**Core Course Sequence** Manufacturing Technologies I Manufacturing Technologies II Manufacturing Technologies III **Complementary Course(s)** Manufacturing Technologies II LAB ** Manufacturing Technologies III LAB ** Manufacturing Technologies Advanced Studies	Manufacturing Technologies
Mechanical Technology	**Core Course Sequence** Mechanical Technology I Mechanical Technology II Mechanical Technology III **Complementary Course(s)** Mechanical Technology II LAB ** Mechanical Technology III LAB ** Mechanical Technology Advanced Studies	Mechanical Technology
Metalworking	**Core Course Sequence** Metalworking I Metalworking II Metalworking III **Complementary Course(s)** Metalworking Advanced Studies	Metalworking
Welding Technology	**Core Course Sequence** Welding Technology I Welding Technology II Welding Technology III **Complementary Course(s)** Welding Technology II LAB ** Welding Technology III LAB ** Welding Technology Advanced Studies	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 level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.

- SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS -

Program Name	Course Sequence	State Skill Standards*
Aerospace Engineering	**Core Course Sequence** Aerospace Engineering I Aerospace Engineering II Aerospace Engineering III **Complementary Course(s)** Aerospace Engineering Advanced Studies	Aerospace Engineering
Energy Technologies	**Core Course Sequence** Energy Technologies I Energy Technologies II Energy Technologies III **Complementary Course(s)** Energy Technologies Advanced Studies	Energy Technologies
Project Lead The Way™ Pathway to Engineering (Aerospace)	**Project Lead The Way™ (PLTW):Pathway to Engineering** PLTW-Introduction to Engineering PLTW-Principles of Engineering PLTW-Aerospace Engineering **Complementary Course(s)** PLTW-Engineering Design and Development	Aerospace Engineering
Project Lead The Way™ Pathway to Engineering (Architectural & Civil)	**Project Lead The Way™ (PLTW):Pathway to Engineering** PLTW-Introduction to Engineering PLTW-Principles of Engineering PLTW-Civil Engineering and Architecture **Complementary Course(s)** PLTW-Engineering Design and Development	Architectural & Civil Engineering
Project Lead The Way™ Pathway to Engineering (Electrical)	**Project Lead The Way™ (PLTW):Pathway to Engineering** PLTW-Introduction to Engineering PLTW-Principles of Engineering PLTW-Digital Electronics **Complementary Course(s)** PLTW-Engineering Design and Development	Electrical Engineering
Project Lead The Way™ Pathway to Engineering (Environmental)	**Project Lead The Way™ (PLTW):Pathway to Engineering** PLTW-Introduction to Engineering PLTW-Principles of Engineering PLTW-Environmental Sustainability **Complementary Course(s)** PLTW-Engineering Design and Development	Environmental Engineering

* 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.

- TRANSPORTATION, DISTRIBUTION & LOGISTICS -

Program Name	Course Sequence	State Skill Standards*
Automotive Service Technician	**Core Course Sequence** Automotive Service Technician I Automotive Service Technician II Automotive Service Technician III Automotive Service Technician IV **Complementary Course(s)** Automotive Service Technician II LAB ** Automotive Service Technician III LAB ** Automotive Service Technician IV LAB **	Automotive Service Technician
Automotive Technology	**Core Course Sequence** Automotive Technology I Automotive Technology II Automotive Technology III **Complementary Course(s)** Automotive Technology II LAB Automotive Technology III LAB Automotive Technology Advanced Studies	Automotive Technology
Aviation Maintenance Technician	**Core Course Sequence** Aviation Maintenance Technician I Aviation Maintenance Technician II Aviation Maintenance Technician III **Complementary Course(s)** Aviation Maintenance Technician Advanced Studies	Aviation Maintenance Technician
Aviation Technology	**Core Course Sequence** Aviation Technology I Aviation Technology II Aviation Technology III **Complementary Course(s)** Aviation Technology Advanced Studies	Aviation Technology
Collision Repair Technology	**Core Course Sequence** Collision Repair Technology I Collision Repair Technology II Collision Repair Technology III **Complementary Course(s)** Collision Repair Technology II LAB ** Collision Repair Technology III LAB ** Collision Repair Technology Advanced Studies	Collision Repair Technology
Diesel Technology	**Core Course Sequence** Diesel Technology I Diesel Technology II Diesel Technology III **Complementary Course(s)** Diesel Technology II LAB ** Diesel Technology III LAB ** Diesel Technology Advanced Studies	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 level course (i.e., level two course with the level two lab course) – see individual course descriptions for requirements and prerequisites.

COURSE DESCRIPTIONS

- ARCHITECTURE & CONSTRUCTION -

Architectural Design I

Abbreviated Name: ***ARCH DESG I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***04.0901***

Prerequisite: None

This course provides Architectural Design students with the basic principles of architectural design. This course introduces fundamental print reading, sketching, digital drafting techniques, and architectural design theory. Students develop their architectural skills through project-based activities. The appropriate use of technology is an integral part of this course.

Architectural Design II

Abbreviated Name: ***ARCH DESG II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***04.0901***

Prerequisite: Architectural Design I

This course is a continuation of Architectural Design I. This course provides intermediate Architectural Design students with advanced principles of architectural design. Areas of emphasis include spatial reasoning, elements and principles of design, application of the design process, and advanced digital drawing techniques. Advanced project-based activities provide students opportunities to develop their architectural design skills. Portfolio development will be emphasized. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Architectural Design II LAB

Abbreviated Name: ***ARCH DESG II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***04.0901***

Prerequisite: Concurrent enrollment in Architectural 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.

Architectural Design III

Abbreviated Name: ***ARCH DESG III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***04.0901***

Prerequisite: Architectural Design II

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

Architectural Design III LAB

Abbreviated Name: ***ARCH DESG III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***04.0901***

Prerequisite: Concurrent enrollment in Architectural Design III

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.

Architectural Design Advanced Studies

Abbreviated Name: ***ARCH DESG AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***04.0901***

Prerequisite: Architectural Design III

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

Construction Technology I

Abbreviated Name: ***CONST TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***46.0000***

Prerequisite: None

This course will introduce students to the world of construction. Through a hands-on approach, each student will develop basic understanding in the areas of construction: safety, blueprint reading, framing, site layout techniques, floor systems, and wall systems. Practical application of safe work habits and the correct use of tools and equipment will be emphasized throughout this course.

Construction Technology II

Abbreviated Name: ***CONST TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***46.0000***

Prerequisite: Construction Technology I

This course is a continuation of Construction Technology I. This course provides intermediate construction students with knowledge and skills in material handling, surveying, site development, concrete, masonry, roof systems, and electrical systems. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Construction Technology II LAB

Abbreviated Name: ***CONST TECH II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***46.0000***

Prerequisite: Concurrent enrollment 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.

Construction Technology III

Abbreviated Name: ***CONST TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***46.0000***

Prerequisite: Construction Technology II

This course is a continuation of Construction Technology II. This course provides advanced construction students with knowledge and skills in plumbing, stair layout, HVAC, and exterior applications. Through hands-on projects, students develop technical skills that are used throughout the construction industry. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Construction Technology III LAB

Abbreviated Name: ***CONST TECH III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***46.0000***

Prerequisite: Concurrent enrollment in Construction Technology III

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.

Construction Technology Advanced Studies

Abbreviated Name: ***CONST TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***46.0000***

Prerequisite: Construction Technology III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Drafting and Design I

Abbreviated Name: ***CADD I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***15.1302***

Prerequisite: None

This course introduces the student to the fundamentals of mechanical and architectural drawing. This course provides students with the knowledge and practice required to produce and analyze multi-view drawings, pictorial drawings, and dimensioning. Students will gain experience using both sketching techniques and computer assisted drafting programs. Various career opportunities and areas for postsecondary study will be explored.

Drafting and Design II

Abbreviated Name: ***CADD II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***15.1302***

Prerequisite: Drafting and Design I

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

Drafting and Design II LAB

Abbreviated Name: ***CADD II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***15.1302***

Prerequisite: Concurrent enrollment in Drafting and Design II

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

Drafting and Design III

Abbreviated Name: ***CADD III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***15.1302***

Prerequisite: Drafting and Design II

This course is a continuation of Drafting and Design II. This course provides advanced CADD (Computer-Aided Drafting and Design) students with instruction in advanced techniques and processes. The students will continue to develop all skills learned in Drafting and Design I and II. Areas of study include both mechanical and architectural drafting and design concepts. 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.

Drafting and Design III LAB

Abbreviated Name: ***CADD III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***15.1302***

Prerequisite: Concurrent enrollment in Drafting and Design III

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.

Drafting and Design Advanced Studies

Abbreviated Name: ***CADD AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***15.1302***

Prerequisite: Drafting and Design III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Furniture and Cabinetmaking I

Abbreviated Name: ***FURN CABINET I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***48.0702***

Prerequisite: None

This course will introduce the beginning furniture and cabinetmaking student to the various stages of construction and assembly of wood products and related materials. This course is intended to provide students with the basic knowledge and skills necessary to design, construct, and finish furniture and/or cabinets in the woodworking industry. Through the course activities the student will gain an understanding of safety procedures, machine operation, and industrial applications.

Furniture and Cabinetmaking II

Abbreviated Name: ***FURN CABINET II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***48.0702***

Prerequisite: Furniture and Cabinetmaking I

This course is a continuation of Furniture and Cabinetmaking I. This course provides intermediate furniture and cabinetmaking student with the necessary knowledge and skills to pursue employment in related industries. This course will increase knowledge gained in Furniture and Cabinetmaking I. Laboratory activities will include advanced processes using tools and equipment currently being used by the industry. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Furniture and Cabinetmaking III

Abbreviated Name: ***FURN CABINET III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***48.0702***

Prerequisite: Furniture and Cabinetmaking II

This course is a continuation of Furniture and Cabinetmaking II. This course provides advanced furniture and cabinetmaking students with knowledge and skills in finish carpentry and cabinetmaking for construction applications. Through hands-on projects, students develop technical skills that are used throughout the construction industry including the software and hardware components of computer numerical-controlled (CNC) equipment. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Furniture and Cabinetmaking Advanced Studies

Abbreviated Name: ***FURN CABINET AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***48.0702***

Prerequisite: Furniture and Cabinetmaking III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Architecture and Construction

Abbreviated Name: ***WORK EXPER CONST*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0002***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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.

- MANUFACTURING -

Automation Technology I

Abbreviated Name: ***AUTOMATION I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***14.4201***

Prerequisite: None

This course introduces students to the fundamentals of automation technologies. Areas of emphasis include lab safety, print reading, measuring techniques, power systems, basic automation systems, and basic programmable logic controls.

Automation Technology II

Abbreviated Name: ***AUTOMATION II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***14.4201***

Prerequisite: Automation Technology I

This course is a continuation of Automation Technology I. This course provides intermediate automation technology students the ability to further their skills and knowledge levels. Areas of study focus on the integration of mechanical, electrical, hydraulic and robotic methods.. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Automation Technology III

Abbreviated Name: ***AUTOMATION III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***14.4201***

Prerequisite: Automation Technology II

This course is a continuation of Automation Technology II. This course provides advanced automation technology students with more in-depth skill development. Students will explore the use of robotics, programmable logic controllers, and the principles of automation and how they apply to multiple industries. 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.

Automation Technology Advanced Studies

Abbreviated Name: ***AUTOMATION AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***14.4201***

Prerequisite: Automation Technology III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Electronic Technology I

Abbreviated Name: ***ELEC TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***47.0105***

Prerequisite: None

This course introduces the student to electronic practices and fundamentals, roles of electronics in communications and industry, and career development. Topics include safety, tools, basic direct current (DC), alternating current (AC), schematics, soldering, measuring electricity, Ohm's/Watt's/Kirchhoff's Laws, semiconductors, electronic circuits, and digital theory.

Electronic Technology II

Abbreviated Name: ***ELEC TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***47.0105***

Prerequisite: Electronic Technology I

This course is a continuation of Electronic Technology I. This course introduces intermediate students to advanced practices, principles, special equipment and materials. Students will develop their knowledge and skills learned in Electronic Technology I. Topics include safety, inductive/capacitive/RCL circuits, semiconductor devices, rectifier/filter circuits, discrete devices and such skills necessary to obtain meaningful employment in the electronics industry. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Electronic Technology II LAB

Abbreviated Name: ***ELEC TECH II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***47.0105***

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 III

Abbreviated Name: ***ELEC TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***47.0105***

Prerequisite: Electronic Technology II

This course is a continuation of Electronic Technology II. This course provides advanced electronics students with instruction in advanced techniques and processes. They will continue to develop all skills learned in Electronic Technology I and II. 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.

Electronic Technology III LAB

Abbreviated Name: ***ELEC TECH III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***47.0105***

Prerequisite: Concurrent enrollment in Electronic Technology III

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

Abbreviated Name: ***ELEC TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***47.0105***

Prerequisite: Electronic Technology III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Manufacturing Technologies I

Abbreviated Name: ***MANUF TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***15.0613***

Prerequisite: None

This course introduces students to the fundamentals of manufacturing technologies. Areas of emphasis include lab safety, print reading, measuring techniques, power systems, basic mechanical systems, and basic electricity. Students will gain experience in technical processes associated with metal, wood, and composites.

Manufacturing Technologies II

Abbreviated Name: ***MANUF TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***15.0613***

Prerequisite: Manufacturing Technologies I

This course is a continuation of Manufacturing Technologies I. This course provides intermediate manufacturing technologies students the ability to further their skills and knowledge levels. Areas of emphasis include spatial reasoning, 3D modeling, additive/subtractive manufacturing processes, joining/fastening processes, and basic instrumentation principles. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Manufacturing Technologies II LAB

Abbreviated Name: ***MANUF TECH II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***15.0613***

Prerequisite: Concurrent enrollment in 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.

Manufacturing Technologies III

Abbreviated Name: ***MANUF TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***15.0613***

Prerequisite: Manufacturing Technologies III

This course is a continuation of Manufacturing Technologies II. This course provides advanced manufacturing technologies students the ability to further their skills and knowledge levels. Areas of emphasis include product development, marketing, quality control, automation, and diagnostic/troubleshooting practices. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Manufacturing Technologies III LAB

Abbreviated Name: ***MANUF TECH III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***15.0613***

Prerequisite: Concurrent enrollment in 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.

Manufacturing Technologies Advanced Studies

Abbreviated Name: ***MANUF TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***15.0613***

Prerequisite: Manufacturing Technologies III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Mechanical Technology I

Abbreviated Name: ***MECH TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***47.0303***

Prerequisite: None

This course introduces students to the operation and maintenance of various mechanical, electrical, and fluid power systems. 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.

Mechanical Technology II

Abbreviated Name: ***MECH TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***47.0303***

Prerequisite: Mechanical Technology I

This course is a continuation of Mechanical Technology I. This course provides intermediate mechanical technology students opportunities to explore the various forms of power application mechanisms. Areas of emphasis include robotics, hydraulics, pneumatics, electrical, mechanical, and other systems of power transmission. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Mechanical Technology II LAB

Abbreviated Name: ***MECH TECH II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***47.0303***

Prerequisite: Concurrent enrollment in Mechanical 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.

Mechanical Technology III

Abbreviated Name: ***MECH TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***47.0303***

Prerequisite: Mechanical Technology II

This course is a continuation of Mechanical Technology II. This course provides advanced mechanical technology students with instruction in advanced techniques and processes. Areas of emphasis include assembling, operating, and maintaining various electrical motor controllers, mechanical power transmission systems, and high pressure fluid power 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.

Mechanical Technology III LAB

Abbreviated Name: ***MECH TECH III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***47.0303***

Prerequisite: Concurrent enrollment in Mechanical Technology III

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.

Mechanical Technology Advanced Studies

Abbreviated Name: ***MECH TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***47.0303***

Prerequisite: Mechanical Technology III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Metalworking I

Abbreviated Name: ***METALWRKG I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***48.0511***

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

Abbreviated Name: ***METALWRKG II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***48.0511***

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. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Metalworking III

Abbreviated Name: ***METALWRKG III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***48.0511***

Prerequisite: Metalworking II

This course is a continuation of Metalworking II. This course is designed to review the 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 and be prepared for postsecondary education.

Metalworking Advanced Studies

Abbreviated Name: ***METALWRKG AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***48.0511***

Prerequisite: Metalworking III

This course is offered to students who have achieved all content standards in a program whose desire is 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

Abbreviated Name: ***WELDING TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***48.0508***

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 the American Welding Society Certification test. 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, tools, safety procedures, machine operation, and industrial applications, and provide them with entry-level skills for employment.

Welding Technology II

Abbreviated Name: ***WELDING TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***48.0508***

Prerequisite: Welding Technology I

This course is a continuation of Welding I. This course provides intermediate welding students the ability to augment and further their skills and knowledge levels. Areas of study will include advanced layout and fabrication methodologies, gas tungsten arc welding of aluminum, stainless steel and TIG spot welding, welding metallurgy, and electric theory. All student activities are designed to enhance students' skill levels toward achievement of American Welding Society certification and/or American Society of Mechanical Engineering welding certification. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Welding Technology II LAB

Abbreviated Name: ***WELDING TECH II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***48.0508***

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 III

Abbreviated Name: ***WELDING TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***48.0508***

Prerequisite: Welding Technology II

This course is a continuation of Welding II. This course provides advanced welding students the ability to augment and further their skills and knowledge levels. All student activities are designed to prepare the students' skill levels to achieve the American Welding Society certification and/or American Society of Mechanical Engineering welding certification. 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.

Welding Technology III LAB

Abbreviated Name: ***WELDING TECH III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***48.0508***

Prerequisite: Concurrent enrollment in Welding Technology III

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

Abbreviated Name: ***WELDING TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***48.0508***

Prerequisite: Welding III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Manufacturing

Abbreviated Name: ***WORK EXPER MANUF*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0013***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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.

- SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS -

Aerospace Engineering I

Abbreviated Name: ***AEROSPACE ENG I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***14.0201***

Prerequisite: None

This course will introduce students to Aerospace Engineering and focus on exposing students to the engineering design process, teamwork, research, analysis, communication methods, human factors, engineering standards, and technical documentation. Students will use engineering and scientific concepts to find solutions to engineering design problems. Students will demonstrate knowledge of the history of flight and its ongoing development, understand the fundamentals of aircraft aerodynamics, structures, propulsion, and navigation, demonstrate the ability to construct and fly an aerodynamic vehicle, understand the fundamentals of rocket and spacecraft design, structures, and propulsion systems, and demonstrate the ability to construct and launch a small scale rocket. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Aerospace Engineering II

Abbreviated Name: ***AEROSPACE ENG II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***14.0201***

Prerequisite: Aerospace Engineering I

This course is a continuation of Aerospace Engineering I. This course provides intermediate aerospace engineering students with an introduction to the interdisciplinary aspects of the engineering of aerospace systems. It is a project-based course, demonstrating how the engineering profession is a multi-disciplinary field. Students are involved in an array of conceptual exercises, simple to intermediate design activities, and projects dealing with engineering in aerospace-related areas including Computer Aided Design (CAD), Aircraft Design and Robotics. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Aerospace Engineering III

Abbreviated Name: ***AEROSPACE ENG III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***14.0201***

Prerequisite: Aerospace Engineering II

This course is a continuation of Aerospace Engineering II. This course provides advanced aerospace engineering students with instruction in advanced techniques and processes. The students will continue to develop all skills learned in Aerospace Engineering I and II. Areas of study include Computing for Engineers, MATLAB, C++, Computer Aided Design (CAD), Graphical Communications applications, Orbital Mechanics, Robotics and Unmanned Aerial Systems (UAS). 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.

Aerospace Engineering Advanced Studies

Abbreviated Name: ***AEROSPACE ENG AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***14.0201***

Prerequisite: Aerospace Engineering III

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

Energy Technologies I

Abbreviated Name: ***ENERGY TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***15.0503***

Prerequisite: None

This course introduces students to the power 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 be introduced to career opportunities and necessary job skills.

Energy Technologies II

Abbreviated Name: ***ENERGY TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***15.0503***

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. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Energy Technologies III

Abbreviated Name: ***ENERGY TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***15.0503***

Prerequisite: Energy Technologies II

This course is a continuation of Energy Technologies II. This course provides advanced energy technologies students with instruction in advanced techniques and processes. 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. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Energy Technologies Advanced Studies

Abbreviated Name: ***ENERGY TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***15.0503***

Prerequisite: Energy Technologies III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

PLTW-Aerospace Engineering

Abbreviated Name: ***PLTW AEROSPACE ENG*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***14.0201***

Prerequisite: PLTW-Principles of Engineering

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is a continuation of the Project Lead the Way™ Pathway to Engineering curriculum. This course explores the evolution of flight, navigation and control, flight fundamentals, aerospace materials, propulsion, space travel, and orbital mechanics. In addition, this course presents alternative applications for aerospace engineering concepts. Students analyze, design, and build aerospace systems. They apply knowledge gained throughout the course in a final presentation about the future of the industry and their professional goals.

PLTW-Civil Engineering and Architecture

Abbreviated Name: ***PLTW CIVIL ENG*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***14.0401***

Prerequisite: PLTW-Principles of Engineering

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is a continuation of the Project Lead the Way™ Pathway to Engineering curriculum. Students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects.

PLTW-Computer Integrated Manufacturing

Abbreviated Name: ***PLTW COMP INT MFG*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***14.1901***

Prerequisite: PLTW-Principles of Engineering

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is a continuation of the Project Lead the Way™ Pathway to Engineering curriculum. Students answer the questions: How are things made? What processes go into creating products? Is the process for making a water bottle the same as it is for a musical instrument? How do assembly lines work? How has automation changed the face of manufacturing? While students discover the answers to these questions, they're learning about the history of manufacturing, robotics and automation, manufacturing processes, computer modeling, manufacturing equipment, and flexible manufacturing systems

PLTW-Digital Electronics

Abbreviated Name: ***PLTW DIG ELEC*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***15.0303***

Prerequisite: PLTW-Principles of Engineering

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is a continuation of the Project Lead the Way™ Pathway to Engineering curriculum. Digital electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras and high-definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards and technical documentation.

PLTW-Engineering Design and Development

Abbreviated Name: ***PLTW ENG DESG DEV*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***14.0101***

Prerequisite: PLTW-Aerospace Engineering or PLTW-Environmental Sustainability or PLTW-Civil Engineering and Architecture or PLTW-Computer Integrated Manufacturing or PLTW-Digital Electronics

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is the capstone course of the Project Lead the Way™ Pathway to Engineering curriculum. In this capstone course, students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel. Upon successful completion of this program, students will be prepared for entry into an Engineering program at the college level.

PLTW-Environmental Sustainability

Abbreviated Name: ***PLTW ENVIRON SUS*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***14.0501***

Prerequisite: PLTW-Principles of Engineering

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is a continuation of the Project Lead the Way™ Pathway to Engineering curriculum. In this course students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply issues, and renewable energy. Applying knowledge of engineering, biology, and ecology through hands-on activities and simulations, students research and design potential solutions to these true-to-life challenges.

PLTW-Introduction to Engineering Design

Abbreviated Name: ***PLTW ENG DESG*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***14.0101***

Prerequisite: None

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is the entry-level course of the Project Lead the Way™ Pathway to Engineering curriculum. The major focus of IED 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.

PLTW-Principles of Engineering

Abbreviated Name: ***PLTW PRIN ENG*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***14.0101***

Prerequisite: PLTW-Introduction to Engineering Design

Schools must be affiliated with the Project Lead The Way™ program to offer this course

This course is a continuation of the Project Lead the Way™ Pathway to Engineering curriculum. This survey course exposes students to major concepts they'll encounter in a post-secondary 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.

Work Experience – Science Technology Engineering Mathematics

Abbreviated Name: ***WORK EXPER STEM*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0015***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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.

- TRANSPORTATION, DISTRIBUTION & LOGISTICS -

Automotive Service Technician I

Abbreviated Name: ***AUTO SERV I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***47.0604***

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. Students will utilize the AYES school to career activities, curriculum, and processes. The program must be certified and follow the national NATEF - AST program standards and requirements of AYES (Automotive Youth Education Systems).

Automotive Service Technician II

Abbreviated Name: ***AUTO SERV II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***47.0604***

Prerequisite: Automotive Service Technician I

This course is a continuation of Automotive Service Technician 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, drive axles, heating and air conditioning, engine performance, braking systems, basic electrical systems, and employability skills. Students will utilize the AYES school to career activities, curriculum, and processes. The program must be certified and follow the national NATEF - AST program standards and requirements of AYES (Automotive Youth Education Systems). The appropriate use of technology and industry-standard equipment is an integral part of this course.

Automotive Service Technician II LAB

Abbreviated Name: ***AUTO SERV II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***47.0604***

Prerequisite: Concurrent enrollment in Automotive Service Technician 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 Service Technician III

Abbreviated Name: ***AUTO SERV III*** *Credits:* ***1*** *Level:* ***L3*** *CIP Code:* ***47.0604***

Prerequisite: Automotive Service Technician II

This course is a continuation of Automotive Service Technician II. This course provides advanced automotive technology students with in-depth study and skill development in engine performance, brakes, steering and suspension service, and drive train service. Students will utilize the AYES school to career activities, curriculum, and processes. The program must be certified and follow the national NATEF - AST program standards and requirements of AYES (Automotive Youth Education Systems). The appropriate use of technology and industry-standard equipment is an integral part of this course.

Automotive Service Technician III LAB

Abbreviated Name: ***AUTO SERV III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***47.0604***

Prerequisite: Concurrent enrollment in Automotive Service Technician III

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 Service Technician IV

Abbreviated Name: ***AUTO SERV IV*** *Credits:* ***1*** *Level:* ***L4C*** *CIP Code:* ***47.0604***

Prerequisite: Automotive Service Technician III

This course is a continuation of Automotive Service Technician III. This course provides advanced automotive technology students with in-depth study and skill development in the repair of automotive engines, automatic transmission, manual transmission, drive train service, and air conditioning system service. Students will utilize the AYES school to career activities, curriculum, and processes. The program must be certified and follow the national NATEF - AST program standards and requirements of AYES (Automotive Youth Education Systems). The appropriate use of technology and industry-standard equipment is an integral part of this course. An internship may be incorporated into the course of study to assist students in making a transition from school to work. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Automotive Service Technician IV LAB

Abbreviated Name: ***AUTO SERV IV L*** *Credits:* ***1*** *Level:* ***L4L*** *CIP Code:* ***47.0604***

Prerequisite: Concurrent enrollment in Automotive Technology IV

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 I

Abbreviated Name: ***AUTO TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***47.0600***

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

Abbreviated Name: ***AUTO TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***47.0600***

Prerequisite: Automotive Technology I

This course is a continuation of Automotive Service 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.

Automotive Technology II LAB

Abbreviated Name: ***AUTO TECH II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***47.0600***

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 III

Abbreviated Name: ***AUTO TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***47.0600***

Prerequisite: Automotive Technology II

This course is a continuation of Automotive Service 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. 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 III LAB

Abbreviated Name: ***AUTO TECH III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***47.0600***

Prerequisite: Concurrent enrollment in Automotive Technology III

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

Abbreviated Name: ***AUTO TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***47.0600***

Prerequisite: Automotive Technology III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Aviation Maintenance Technician I

Abbreviated Name: ***AVI MAINT TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***47.0608***

Prerequisite: None

This course will introduce students to the operational and scientific 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 preventive maintenance. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Aviation Maintenance Technician II

Abbreviated Name: ***AVI MAINT TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***47.0608***

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, weight and balance, FAA regulations, 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 III

Abbreviated Name: ***AVI MAINT TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***47.0608***

Prerequisite: Aviation Maintenance Technician II

This course is a continuation of Aviation Maintenance Technician II. This course provides advanced aviation maintenance technician students with instruction in advanced techniques and processes. The students will continue to develop all skills learned in Aircraft Maintenance Technician I and II. Areas of study include an introduction to aircraft systems. Discussions include a study of the principals and concepts of basic DC and AC electrical theory, magnetism, batteries, generators, motors, voltage regulators, circuit protection, and electrical component installations (FAR Part 65). 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. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Aviation Maintenance Technician Advanced Studies

Abbreviated Name: ***AVI MAINT TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***47.0608***

Prerequisite: Aviation Maintenance Technician III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Aviation Technology I

Abbreviated Name: ***AVIATION TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***49.0101***

Prerequisite: None

This course is designed as an introduction to general aeronautics. It includes the study of physical mathematics, weight and balance, FAA regulations, common and special tools and measuring devices, fluid lines, hardware, aircraft servicing, and documentation (FAR Part 65). This course is also designed to expand and to prepare the prospective A&P technician for the electrical portion of the Oral and Practical exam in obtaining an FAA certified license. Provide basic information on the principles, fundamentals and technical procedures in the areas of aircraft, aerospace and aviation professions. Students will learn the history of flight, developmental trends, the principles of flight and navigation, the flight environment of an aerospace vehicle, the missions and roles of today's aerospace vehicles, the fundamentals of rocketry and space travel, and the physiology of flight. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Aviation Technology II

Abbreviated Name: ***AVIATION TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***49.0101***

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. The student 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, the student 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 III

Abbreviated Name: ***AVIATION TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***49.0101***

Prerequisite: Aviation Technology II

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

Aviation Technology Advanced Studies

Abbreviated Name: ***AVIATION TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***49.0101***

Prerequisite: Aviation Technology III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Collision Repair Technology I

Abbreviated Name: ***COLL REPAIR I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***47.0603***

Prerequisite: None

This course provides entry-level collision repair students with an orientation to collision repair and refinishing. Students will develop their skills through industry standard tools and equipment. Areas of emphasis include safety, surface preparation, dent repair, and top coat application.

Collision Repair Technology II

Abbreviated Name: ***COLL REPAIR II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***47.0603***

Prerequisite: Collision Repair Technology I

This course is a continuation of Collision Repair Technology I. This course provides intermediate collision repair students with instruction in metal repair, painting techniques, and the application of paint systems. Areas of emphasis include inspection, estimating, adhesives, paint mixing, defects, and customer relations. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Collision Repair Technology II LAB

Abbreviated Name: ***COLL REPAIR II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***47.0603***

Prerequisite: Concurrent enrollment in Collision Repair 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.

Collision Repair Technology III

Abbreviated Name: ***COLL REPAIR III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***47.0603***

Prerequisite: Collision Repair Technology II

This course is a continuation of Collision Repair Technology II. This course provides advanced collision repair students with instruction in advanced techniques and processes. The students will continue to develop all skills learned in Collision Repair Technology I and II. 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.

Collision Repair Technology III LAB

Abbreviated Name: ***COLL REPAIR III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***47.0603***

Prerequisite: Concurrent enrollment in Collision Repair Technology III

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.

Collision Repair Technology Advanced Studies

Abbreviated Name: ***COLL REPAIR AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***47.0603***

Prerequisite: Collision Repair Technology III

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

Diesel Technology I

Abbreviated Name: ***DIESEL TECH I*** *Credits:* ***1*** *Level:* ***L1*** *CIP Code:* ***47.0605***

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 and operating principles. The repair, maintenance, and diagnostic procedures will enhance students' awareness of the applications of scientific principles. 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

Abbreviated Name: ***DIESEL TECH II*** *Credits:* ***1*** *Level:* ***L2*** *CIP Code:* ***47.0605***

Prerequisite: Diesel Technology I

This course is a continuation of Diesel Technology I. This course is designed to provide intermediate students with diesel systems service and repair skills. It will provide students with in-depth knowledge of diesel systems operating principles and the applications of diesel power. Areas of study may include: engines, steering and suspension, preventative maintenance, hydraulics, electrical systems, and braking systems. 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

Abbreviated Name: ***DIESEL TECH II L*** *Credits:* ***1*** *Level:* ***L2L*** *CIP Code:* ***47.0605***

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 III

Abbreviated Name: ***DIESEL TECH III*** *Credits:* ***1*** *Level:* ***L3C*** *CIP Code:* ***47.0605***

Prerequisite: Diesel Technology II

This course is a continuation of Diesel Technology II. This course is designed to provide advanced students with diesel systems service and repair skills. Areas of study may include: engines, steering and suspension, preventative maintenance, hydraulics, electrical systems, and braking systems. 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. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

Diesel Technology III LAB

Abbreviated Name: ***DIESEL TECH III L*** *Credits:* ***1*** *Level:* ***L3L*** *CIP Code:* ***47.0605***

Prerequisite: Concurrent enrollment in Diesel Technology III

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

Abbreviated Name: ***DIESEL TECH AS*** *Credits:* ***1*** *Level:* ***AS*** *CIP Code:* ***47.0605***

Prerequisite: Diesel Technology III

This course is offered to students who have achieved all content standards in a program whose desire is 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.

Work Experience – Transportation Distribution and Logistics

Abbreviated Name: ***WORK EXPER TRANS*** *Credits:* ***1*** *Level:* ***WK*** *CIP Code:* ***99.0016***

Prerequisite: None

This course is designed to expand the students' opportunities for applied learning. This course provides an in-depth 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 & CONSTRUCTION -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Architectural Design I	ARCH DESG I	L1	04.0901	1	F
Architectural Design II	ARCH DESG II	L2	04.0901	1	F
Architectural Design II LAB	ARCH DESG II L	L2L	04.0901	1	F
Architectural Design III	ARCH DESG III	L3C	04.0901	1	F
Architectural Design III LAB	ARCH DESG III L	L3L	04.0901	1	F
Architectural Design Advanced Studies	ARCH DESG AS	AS	04.0901	1	F
Construction Technology I	CONST TECH I	L1	46.0000	1	F
Construction Technology II	CONST TECH II	L2	46.0000	1	F
Construction Technology II LAB	CONST TECH II L	L2L	46.0000	1	F
Construction Technology III	CONST TECH III	L3C	46.0000	1	F
Construction Technology III LAB	CONST TECH III L	L3L	46.0000	1	F
Construction Technology Advanced Studies	CONST TECH AS	AS	46.0000	1	F
Drafting and Design I	CADD I	L1	15.1302	1	F
Drafting and Design II	CADD II	L2	15.1302	1	F
Drafting and Design II LAB	CADD II L	L2L	15.1302	1	F
Drafting and Design III	CADD III	L3C	15.1302	1	F
Drafting and Design III LAB	CADD III L	L3L	15.1302	1	F
Drafting and Design Advanced Studies	CADD AS	AS	15.1302	1	F
Furniture and Cabinetmaking I	FURN CABINET I	L1	48.0702	1	N
Furniture and Cabinetmaking II	FURN CABINET II	L2	48.0702	1	N
Furniture and Cabinetmaking III	FURN CABINET III	L3C	48.0702	1	N
Furniture and Cabinetmaking Advanced Studies	FURN CABINET AS	AS	48.0702	1	N
Work Experience - Architecture and Construction	WORK EXPER CONST	WK	99.0002	1	F

- MANUFACTURING -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Automation Technology I	AUTOMATION I	L1	14.4201	1	F
Automation Technology II	AUTOMATION II	L2	14.4201	1	F
Automation Technology III	AUTOMATION III	L3C	14.4201	1	F
Automation Technology Advanced Studies	AUTOMATION AS	AS	14.4201	1	F
Electronic Technology I	ELEC TECH I	L1	47.0105	1	F
Electronic Technology II	ELEC TECH II	L2	47.0105	1	F
Electronic Technology II LAB	ELEC TECH II L	L2L	47.0105	1	F
Electronic Technology III	ELEC TECH III	L3C	47.0105	1	F
Electronic Technology III LAB	ELEC TECH III L	L3L	47.0105	1	F
Electronic Technology Advanced Studies	ELEC TECH AS	AS	47.0105	1	F
Manufacturing Technologies I	MANUF TECH I	L1	15.0613	1	F
Manufacturing Technologies II	MANUF TECH II	L2	15.0613	1	F
Manufacturing Technologies II LAB	MANUF TECH II L	L2L	15.0613	1	F
Manufacturing Technologies III	MANUF TECH III	L3C	15.0613	1	F
Manufacturing Technologies III LAB	MANUF TECH III L	L3L	15.0613	1	F
Manufacturing Technologies Advanced Studies	MANUF TECH AS	AS	15.0613	1	F
Mechanical Technology I	MECH TECH I	L1	47.0303	1	F
Mechanical Technology II	MECH TECH II	L2	47.0303	1	F
Mechanical Technology II LAB	MECH TECH II L	L2L	47.0303	1	F
Mechanical Technology III	MECH TECH III	L3C	47.0303	1	F
Mechanical Technology III LAB	MECH TECH III L	L3L	47.0303	1	F
Mechanical Technology Advanced Studies	MECH TECH AS	AS	47.0303	1	F
Metalworking I	METALWRKG I	L1	48.0511	1	F
Metalworking II	METALWRKG II	L2	48.0511	1	F
Metalworking III	METALWRKG III	L3C	48.0511	1	F
Metalworking Advanced Studies	METALWRKG AS	AS	48.0511	1	F
Welding Technology I	WELDING TECH I	L1	48.0508	1	F
Welding Technology II	WELDING TECH II	L2	48.0508	1	F
Welding Technology II LAB	WELDING TECH II L	L2L	48.0508	1	F
Welding Technology III	WELDING TECH III	L3C	48.0508	1	F
Welding Technology III LAB	WELDING TECH III L	L3L	48.0508	1	F
Welding Technology Advanced Studies	WELDING TECH AS	AS	48.0508	1	F
Work Experience - Manufacturing	WORK EXPER MANUF	WK	99.0013	1	F

- SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Aerospace Engineering I	AEROSPACE ENG I	L1	14.0201	1	F
Aerospace Engineering II	AEROSPACE ENG II	L2	14.0201	1	F
Aerospace Engineering III	AEROSPACE ENG III	L3C	14.0201	1	F
Aerospace Engineering Advanced Studies	AEROSPACE ENG AS	AS	14.0201	1	F
Energy Technologies I	ENERGY TECH I	L1	15.0503	1	F
Energy Technologies II	ENERGY TECH II	L2	15.0503	1	F
Energy Technologies III	ENERGY TECH III	L3C	15.0503	1	F
Energy Technologies Advanced Studies	ENERGY TECH AS	AS	15.0503	1	F
PLTW-Aerospace Engineering	PLTW AEROSPACE ENG	L3C	14.0201	1	F
PLTW-Civil Engineering and Architecture	PLTW CIVIL ENG	L3C	14.0401	1	F
PLTW-Computer Integrated Manufacturing	PLTW COMP INT MFG	L3C	14.1901	1	F
PLTW-Digital Electronics	PLTW DIG ELEC	L3C	15.0303	1	F
PLTW-Engineering Design and Development	PLTW ENG DESG DEV	AS	14.0101	1	F
PLTW-Environmental Sustainability	PLTW ENVIRON SUS	L3C	14.0501	1	N
PLTW-Introduction to Engineering Design	PLTW ENG DESG	L1	14.0101	1	F
PLTW-Principles of Engineering	PLTW PRIN ENG	L2	14.0101	1	F
Work Experience – Science Technology Engineering Mathematics	WORK EXPER STEM	WK	99.0015	1	F

- TRANSPORTATION, DISTRIBUTION & LOGISTICS -

COURSE TITLE	ABBREVIATED NAME	LEVEL	CIP CODE	CREDITS	NON-TRAD
Automotive Service Technician I	AUTO SERV I	L1	47.0604	1	F
Automotive Service Technician II	AUTO SERV II	L2	47.0604	1	F
Automotive Service Technician II LAB	AUTO SERV II L	L2L	47.0604	1	F
Automotive Service Technician III	AUTO SERV III	L3	47.0604	1	F
Automotive Service Technician III LAB	AUTO SERV III L	L3L	47.0604	1	F
Automotive Service Technician IV	AUTO SERV IV	L4C	47.0604	1	F
Automotive Service Technician IV LAB	AUTO SERV IV L	L4L	47.0604	1	F
Automotive Technology I	AUTO TECH I	L1	47.0600	1	F
Automotive Technology II	AUTO TECH II	L2	47.0600	1	F
Automotive Technology II LAB	AUTO TECH II L	L2L	47.0600	1	F
Automotive Technology III	AUTO TECH III	L3C	47.0600	1	F
Automotive Technology III LAB	AUTO TECH III L	L3L	47.0600	1	F
Automotive Technology Advanced Studies	AUTO TECH AS	AS	47.0600	1	F
Aviation Maintenance Technician I	AVI MAINT TECH I	L1	47.0608	1	F
Aviation Maintenance Technician II	AVI MAINT TECH II	L2	47.0608	1	F
Aviation Maintenance Technician III	AVI MAINT TECH III	L3C	47.0608	1	F
Aviation Maintenance Technician Advanced Studies	AVI MAINT TECH AS	AS	47.0608	1	F
Aviation Technology I	AVIATION TECH I	L1	49.0101	1	F
Aviation Technology II	AVIATION TECH II	L2	49.0101	1	F
Aviation Technology III	AVIATION TECH III	L3C	49.0101	1	F
Aviation Technology Advanced Studies	AVIATION TECH AS	AS	49.0101	1	F
Collision Repair Technology I	COLL REPAIR I	L1	47.0603	1	F
Collision Repair Technology II	COLL REPAIR II	L2	47.0603	1	F
Collision Repair Technology II LAB	COLL REPAIR II L	L2L	47.0603	1	F
Collision Repair Technology III	COLL REPAIR III	L3C	47.0603	1	F
Collision Repair Technology III LAB	COLL REPAIR III L	L3L	47.0603	1	F
Collision Repair Technology Advanced Studies	COLL REPAIR AS	AS	47.0603	1	F
Diesel Technology I	DIESEL TECH I	L1	47.0605	1	F
Diesel Technology II	DIESEL TECH II	L2	47.0605	1	F
Diesel Technology II LAB	DIESEL TECH II L	L2L	47.0605	1	F
Diesel Technology III	DIESEL TECH III	L3C	47.0605	1	F
Diesel Technology III LAB	DIESEL TECH III L	L3L	47.0605	1	F
Diesel Technology Advanced Studies	DIESEL TECH AS	AS	47.0605	1	F
Work Experience - Transportation Distribution and Logistics	WORK EXPER TRANS	WK	99.0016	1	F