# CAREER AND TECHNICAL EDUCATION DEPARTMENT

#### **Department Philosophy**

CTE programs prepare students to take careers in specific fields or continue advanced study in post-secondary programs. The courses are often project-based, with outcomes aligning to skills needed for the workplace. CTE is focused on skills. Practice, hands-on experience, and application tests make up the bulk of CTE. This is important because CTE careers require workers to have experience in their field *before* starting a career. CTE courses include instruction in the following areas: literacy, mathematical practices, technical content, and employability skills. To prepare students for post-secondary opportunities, students have opportunities to earn in-demand industry certification and highly specific technical skills in addition to transferable skills across multiple career pathways. Any student in Bloom Township District 206 can enroll in a CTE course regardless of race, color, national origin, sex or disability. If a prerequisite course is needed, it is noted within this summary.

#### **Business Department Courses**

GRADE 9	GRADE 10	GRADE 11	GRADE 12
Computer Applications I/II	Computer Applications I/II	Computer Applications I/II	Computer Applications I/II
		Marketing	Marketing
		Sports and Entertainment Marketing	Sports and Entertainment Marketing
		Microsoft Office Suites	Microsoft Office Suites
		Accounting I/II	Accounting I/II
		Entrepreneurship I/II	Entrepreneurship I/II

Course Title: Computer Applications I/II

Grade Level: Grades 11-12

**Prerequisite:** None

Credit: One Year; one credit

To remain current in today's ever-changing workplace, up-to-date computer skills are a necessity. This is an orientation-level course designed to develop awareness and understanding of application software and equipment used to perform tasks in business, marketing, and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications. Computer Applications will train students in the areas of Word, Excel, Access, PowerPoint, and Publisher. Using the Microsoft Office 2016 suite, students will become proficient with intermediate and advanced features of these programs. Students will gain hands-on experience completing projects using the various programs. The goal of this course is to help students compete in today's world of technology and achieve success in whatever field they choose to pursue.

Course Title: Marketing
Grade Level: 11-12
Prerequisite: None

Credit: One Semester; one half credit

Did you ever wonder how major companies develop their selling strategies? Students selecting this course will study how products progress via a marketing plan. This learning experience will provide students with basic marketing concepts as they relate to our emerging global economy. Real-life examples will be presented from industry as you follow products from the producer to the consumer.

**Course Title:** Sports and Entertainment Marketing

Grade Level: 11-12 Prerequisite: None

Credit: One Semester; one half credit

This course is for students with an interest in sports, entertainment and event marketing with an emphasis placed on the following principles: endorsements; branding, licensing and naming rights; business foundations; concessions; on-site merchandising; and human relations. Students will take in-depth look at how young adults are targeted by big marketing establishments. Learn what it takes to create and trademark a successful brand or product, as well as how to establish target markets. Project-based learning strategies include marketing simulations and teamwork.

Course Title: Microsoft Office Suites

**Grade Level:** Grades 11-12

**Prerequisite:** None

Credit: One Year; one credit

This course is designed to prepare you to become a Microsoft Office specialist and to provide opportunities for you to expand upon the skills and concepts from Computer Applications. Learn the additional components of Microsoft Office Suite, including Advanced Word (special document creation), Excel (spreadsheets & amp; formula creation), Publisher (desktop publishing) operations, as well as PowerPoint (advanced presentations). The environment and structure of this class is set up for real-world simulation. Students will be working on a project-to-project basis with deadlines and basic expectations. Emphasis on quality and creativity will be continued.

**Course Title:** Accounting

Grade Level: 11-12

Prerequisite: A strong foundation in math suggested

Credit: One Year; one credit

This course is recommended for students who want to pursue a fundamental understanding of accounting for college and for a career. The practices of a business accounting program are presented. The theory of double entry accounting and the accounting cycle are emphasized. Accounting is a basic requirement for college business majors. Problem applications will be presented to enhance understanding. The study of payroll accounting, inventory methods, and methods of depreciation, which provide students with the practical experience of keeping financial records for a simulated business enterprise during a normal month's operations are also covered. (Dual Credit and Industry Certification Available)

Course Title: Entrepreneurship I/II

Grade Level: 11-12 Prerequisite: None

Credit: One year; one credit

Interested in being your own boss? Do you have a great idea to start a business? This one-year course is designed to prepare students to run their own business and to become an entrepreneur. Students will learn the principles of business, how to write a business plan, how to market their business idea; and the essential elements necessary to be a successful business owner. Certification and dual credit opportunity available to students.

### **Family and Consumer Science Department Courses**

GRADE 9	GRADE 10	GRADE 11	GRADE 12
	Culinary Arts I/II	Culinary Arts I/II	Culinary Arts I/II
		Culinary Arts III	Culinary Arts III
	Fashion Design	Fashion Design	Fashion Design
	Child Development I/II	Child Development I/II	Child Development I/II
		Advanced Child Development	Advanced Child Development

Course Title: Culinary Arts I/II

Grade Level: 10-12 Prerequisite: None

Credit: One semester; one half credit

Culinary Arts is designed to teach basic food preparation skills utilizing various types of culinary equipment and a range of preparation and cooking techniques. The following areas of study are covered in this course: kitchen and food safety, measuring, knife skills, cooking methods, nutrition, recipe comprehension, food cost, and time management skills through demonstration and content study. The course also includes a study of basic proteins, starches, meats, fish, dairy and desserts. Lab periods provide practical experiences in time management, equipment use, food preparation skills. While this course provides personal enrichment, it may also serve as a foundation for further training in culinary arts.

Course Title: Culinary Arts III

Grade Level: 11-12

Prerequisite: Culinary Arts I/II
Credit: One Year; one credit

Students will attain the knowledge and develop skills within the culinary service industry. Students will follow the ProStart curriculum certified by the National Restaurant Association (NRA) and Illinois Restaurant Association (IRA). Students will plan, prepare and serve restaurant quality breakfasts and lunches. The ProStart I program combines relevant classroom activities with cafeteria observations and job shadowing experiences. Upon completion of the ProStart I program, students will take the ServSafe Managers certification test.



**Course Title:** Fashion Design

Grade Level: 10-12 Prerequisite: None

Credit: One Year; one credit

Students will learn about the fashion industry, including design, construction, production and marketing of women's, men's, and children's fashions from development of fibers and fabrics to the strategies of fashion merchandisers and retailers. Students will learn techniques and develop skills that are used in garment construction. They will have the opportunity to learn how to use small sewing equipment, sewing machines and sergers. Students will also be trained on how to use an embroidery machine. Students will also learn about different fibers and fabrics, and how to select the proper fabric for their projects.

Course Title: Child Development I/II

Grade Level: 10-12 Prerequisite: None

Credit: One Year; one credit

This course covers information from conception through the first week of life. Included in this course is a unit on parenting which helps students think through the responsibilities and roles of parents. This course exposes students to career components in education through application of theory in a 9-week preschool lab. During the preschool students plan and implement developmentally appropriate lessons while engaging preschoolers in the learning.

Course Title: Advanced Child Development

Grade Level: 11-12

**Prerequisite:** Introduction to Child Development

Credit: One Year; one credit

This course involves an examination of current early childhood administrative practices and procedures. The principles of planning, implementing, and evaluating a developmentally appropriate curricula are studied. Students examine the management process of planning, staffing, record keeping, budgeting, and purchasing and monitoring for quality. Formation of policy statements, philosophy, programming, planning, evaluation and working with parents is included. Students become familiar with state licensing standards, accreditation, community resources and professional organizations.

## **Industrial Education Department Courses**

GRADE 9	GRADE 10	GRADE 11	GRADE 12
	Geometry in		
	Construction		
	Manufacturing Technology I/II	Manufacturing Technology I/II	
		Metalworking I	Metalworking I
		Metalworking II	Metalworking II
	Woodworking	Woodworking	Woodworking
	Orientation	Orientation	Orientation
		Advanced Woods	Advanced Woods
	Welding	Welding	Welding
	Technology I/II	Technology I/II	Technology I/II
		Advanced Welding	Advanced Welding
	Auto	Auto	Auto
	Orientation	Orientation	Orientation
		Automotive Technology I	Automotive Technology I
			Automotive Technology II
			Internship Class
			Internship Job Station

Course Title: Geometry in Construction

Grade Level: 10 Prerequisite: None

Credit: One year; one credit

Geometry in Construction is an interdisciplinary course that integrates Geometry and Construction topics through the building of a significant construction project. The purpose of the course is to provide students with a better understanding of both the Geometry and the Construction content through the combination of the academic and work-world contexts. The Geometry content matches that of the other Geometry courses taught in the Math Department. Additional emphasis is given to teamwork and problem-solving. This is a double-period course in which students earn credit both for Geometry and for Construction.

Course Title: Manufacturing Technology I/II

Grade Level: 10-12 Prerequisite: None

Credit: One year; one credit

This Industrial Education course is a full-year comprehensive course designed for the study of general concepts and principles of manufacturing and manufacturing systems. This course provides hands-on learning experiences where students will learn the basic principles and operative skills to setup, program, and operate Computer Numerical Control (CNC) machinery. Instruction includes an overview of the machining process, quality control, inspection, blueprint reading, beginning CNC operations and manual programming. Manufacturing related career opportunities will be explored, as well as job requirements and employer expectations for manufacturing employment. Students will also be introduced to 3D printing, laser cutting and engraving, simple sheet-metal work, hand tools, and basic robotics. This course will give students a behind-the-scenes look at the vast industry called manufacturing. In this course, students will examine the basics of manufacturing, including a brief history and some of the basic processes and principles that work together to transform raw materials into useful and valuable commodities.

Course Title: Metalworking I

Grade Level: 11-12 Prerequisite: None

Credit: One year; one credit

This course introduces students to the safe operation of basic metalworking machines including tool room lathes, vertical mills, drill presses, band saws, and ARC/MIG welders. Students will learn to read precision, semi-precision measuring tools, and basic mechanical prints to produce metalwork projects. Hands-on experience and practical applications are included. Students have the opportunity to apply these skills to attain industry-recognized NIMS credentials such as Measurement Materials and Safety, Job Planning, Benchwork and Layout, and Drill Press Certifications along with an OSHA 10 Certification.

Course Title: Metalworking II

Grade Level: 11-12 Prerequisite: None

Credit: One year; one credit

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, and heat-treating procedures. Advanced welding methods will be presented as well as career awareness and opportunities in the metal industries. The appropriate use of technology and industry-standard equipment is an integral part of this course. After the successful completion of this course, students will complete the National Institute for Metalworking Skills (NIMS) Level II certification exam.

**Course Title:** Woodworking Orientation

Grade Level: 10-12 Prerequisite: None

Credit: One Year; one credit

This course will introduce students to basic woodworking skills. Students will learn how to properly operate and maintain woodworking tools and machines, learn to identify different types of wood, and the characteristics of various types of woods while completing basic projects. This is primarily a hands-on lab course where students learn through demonstration and project-based learning activities

**Course Title:** Advanced Woods

Grade Level: 11-12

Prerequisite: Woodworking Orientation Credit: One Year; one credit

Advanced Woods is a full-year, comprehensive course designed to develop student's skills in woodworking as it relates to the technological world. Students use all major woodworking machinery to produce individual projects created by following detailed plans. The skills students develop include the ability to follow sequential plans of procedure, machine operations, measurement and computation, cooperative work, project design, finish techniques, safe work practice and self-direction.

Course Title: Welding Technology I/II

Grade Level: 10-12 Prerequisite: None

Credit: One Year; one credit

Welding Technology I/II enables students to gain knowledge of the properties, uses, and applications of various metals, skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes), and experience in identifying, selecting, and rating appropriate techniques. Welding courses often include instruction in interpreting blueprints or other types of specifications

Course Title: Advanced Welding

Grade Level: 11-12

Prerequisite: Welding Technology I/II Credit: One Year, one credit

This course teaches basic fundamentals that relate to Arc and Oxy-fuel welding theory and practice. Flat position welding using shielded metal arc welding, oxy-acetylene welding and cutting, and plasma cutting are taught. This course is for students with a career goal in the welding field. Training conditions closely align with AWS welding standards found in industry. Students have the opportunity to earn Dual Credit through Prairie State College with a grade of C or better. Students have the opportunity to earn industry certification.

**Course Title:** Auto Orientation

Grade Level: 10-12 Prerequisite: None

Credit: One Year; one credit

Automotive Orientation emphasizes preventative auto maintenance and automobile troubleshooting. Course content typically includes tune-up, oil change, and lubrication skills; tire replacement, alignment, and balancing; and basic knowledge of brake, cooling, electrical, emission, fuel, ignition, steering, suspension, and transmission systems. Industry certification is available to students.

Course Title: Automotive Technology I

Grade Level: 11-12

Prerequisite: Auto Orientation Credit: One Year; two credits

Auto Technology I covers theory and operation of the basic components of the modern automobile. Areas of study include the safe and efficient use of automotive tools, automotive engine fundamentals including theory and operation, automotive maintenance, cooling systems, tire and wheel repair, brake and suspension inspections. This is a prerequisite for Auto Technology II and stresses entry level job skills. It is recommended for students interested in becoming an automotive technician as well as for those who wish to learn basic automotive repair for personal use.

Course Title: Automotive Mechanics Technology II

Grade Level: 12

Prerequisite: Automotive Mechanics Technology I

Credit: One Year; two credits

This course will provide a more advanced study of design and construction of automotive technology and practical experiences in automotive repair. Areas of study include brake system operation and repair, steering and suspension systems, engine mechanical diagnosis and servicing of fuel injection, emission control systems and electronic engine controls. This is primarily a hands-on lab course where students learn through demonstration and project-based learning activities.



**Course Title:** Internship Class

Grade Level: 12 Prerequisite: None

Credit: One Year; one credit

This capstone course provides the theory needed to succeed in the world of work. Classroom activities related to on-the-job responsibilities which help acquire related skills to secure and maintain a job. Interested students must be interviewed by the Internship Coordinator to be enrolled. **Students must have a job and provide their own transportation.** 

**Course Title:** Internship Job Station

Grade Level: 12 Prerequisite: None

Credit: One Year; one credit

This course provided on-the-job experience for students who desire to develop occupational skills through work experience. Occupational competencies are developed through a combination of classroom and on-the-job experiences.

INTERESTED STUDENTS MUST ENROLL IN BOTH THE INTERNSHIP CLASS AND INTERNSHIP JOB STATION course together.