Career and Technical Education Department



Business Education Family and Consumer Sciences Industry and Technology 2024 - 2025

DUAL CREDIT CLASSES

Career and Technical Education Courses prepare students for a future in today's world of work, college and career skills. **TWENTY-TWO** courses currently available to **all students** at Willowbrook High School in **CTE** are offered as dual credit - transferable courses – from College of DuPage at **NO COST** to WBHS students. These classes transfer as elective or department credit to any college/university who accepts credit from College of DuPage:

WBHS CTE COURSE COD COL	URSE CODE	CREDITS
Accounting 2 Honors	ACCOU 1110	3
Business Explorations	BUSIN 1111	3
Entrepreneurship	BUSIN 1161	3
College & Career Tech	OFTI 1210	3
Public Speaking & Comm/Tech	OFTI 1250	3
Keyboarding	OFTI 1100	3
Intro to Business	MANAG 1100	3
Marketing Sports & Entertainment	MARKE 1100	3
Culinary Arts 3	CULN 1120	2
Culinary Arts 4	CULN 1120	2
Fitness & Nutrition	CULN 1109	1
Education Teacher Prep	EDUC 1100	3
Education Teacher Prep 2	EDUC 1101	3
Arch Drafting & Design 2	ARCH 1211	3
Auto Upkeep	AUTO 1040	3
Auto 1	AUTO 1040	3
Auto 2	AUTO 1110	3
Computer Repair 1	CIT 1100	2
Computer Repair 2	CIT 1111	3
Photography 1	PHOTO 1100	3
Photography 2	РНОТО 1102	3
Digital Imaging	РНОТО 1101	3

Currently 61 college credits are available to each WBHS/ CTE Student; Average savings is \$475 per course above.



CAREER & TECHNICAL EDUCATION DEPARTMENT CERTIFICATES

Culinary 1: Culinary 2: Culinary 3:	Servsafe Food Handler Servsafe Allergen Food Safety & Sanitation Managerial
Human Growth:	Shaken Baby Syndrome Sudden Infant Death Syndrome Prevention
Preschool 1:	Gateway ECE Level 1 Mandated Reporting Poison Prevention Education Lead in the Water
Preschool 2:	Trauma-Informed Practice for Child Care Providers
Preschool Intern:	Infant, Child & Adult CPR First Aid, AED
Auto 1, 2, 3, 4, 5:	Electude Safety & Environment
Auto 3:	ASE: Engine Performance ASE: Maintenance & Light Repair ASE: Automatic Transmission ASE: Electrical ASE: Manual Drive Train EPA 609
Auto 4 & 5:	ASE: Automobile Service Technology ASE: Electrical/Electronic Systems ASE: Suspension & Steering
Computer Repair:	Computer TIA Certification
Woods 1 & 2:	Woodworkers Career Alliance
Building Trades 1 & 2:	OSHA -10 Construction
Principles of Engineering	G-Suite
CTE Apprenticeship	OSHA-10 Manufacturing

CTE – Business Education

Accounting 1 (Full-Year Course)

This course is highly recommended for students who plan to study any field of business in college. The study of accounting emphasizes the accounting principles and concepts necessary to process financial data. Students acquire the background essential for a solid foundation for the further study of accounting as well as work in a wide range of accounting, clerical, and data processing jobs or any other business field. Computerized accounting software and spreadsheets are integrated into the curriculum. *(Option of Honors Credit)*

Prerequisite: None

Grades: 10, 11, 12

*Recommended Public Speaking & Communications Technology



Accounting 2 - Honors (Full-Year Course)

This course is highly recommended for students who plan to study any field of business in college. This is an introductory college accounting course. It includes departmentalized accounting, cost accounting, accruals, deferrals, controlling financial resources, and accounting for partnerships and corporations. Computerized accounting software and spreadsheets are integrated.

Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

 Prerequisite: Accounting 1
 Grades: 11, 12

 *Recommended Public Speaking & Communications Technology

Business Explorations (One Semester)

This course will provide students with basic career management tools required in today's workforce, which includes how to design an impressive resume and cover letter. The class is designed to prepare students to successfully enter today's rapidly changing job market and develop skills to ensure lifelong career success, including the application and interview process as well as communications and technology. Students will examine a variety of employment opportunities in the business world that range from professional careers to those involving technical and service-based training. Areas of study include verbal and nonverbal communications as they relate to customer service and methods for responding to a variety of customers and business relations, marketing, management, and law. *(Option of Honors Credit)*

Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite: None

Grades: All



Business Law (One Semester)

This course informs the student about everyday law; students also participate in lively debates as well as a real world mock trial. The course discusses one's legal rights and benefits as well as one's legal duties, obligations, and liabilities. Topics covered in business law include criminal law, civil law, juvenile law, contracts, wills, estates, and a variety of current legal issues that arise in today's society. Students have the opportunity to attend two field trips through this class: tour the College of DuPage Criminal Justice Facility and spend a day in court at the DuPage County Courthouse. *(Option of Honors Credit)*

Prerequisite: None

Grades: 10, 11, 12

<u>College & Career Technology</u> (One Semester)

Don't be left out when it comes to learning and knowing how to use Microsoft Office Suite. Learn word processing, database, and spreadsheet applications (Microsoft Word, Access, and Excel) and how to integrate them all together. This is a skill you should know whether you plan on going to college or are entering the world of work. (Option of Honors Credit)

Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite: None



This course focuses on specific consumer problems that students will encounter now and as an adult. This subject relates to everyday living and helps prepare individuals for making wise purchasing decisions. Topics include: budgeting, savings/checking accounts, investments, comparisonshopping, using credit wisely, tax preparation, insurance, advertising practices, labor relations, and various consumer protection laws. **This course meets the consumer education graduation requirement, and therefore cannot be taken if a student already passed Introduction to Business.**

Sheltered Also Available

*Online Students will use the District 88 Blackboard, www.nucleus.net and gmail. Online consumer meets the requirements for Personal Management Boy Scout Merit Badge.

Prerequisite: None

Grades: 10, 11, 12



Entrepreneurship (One Semester)

Managers play an important role in the success of a business. This course prepares students with the skills managers need to make a positive impact on implementing change in the workplace. Topics include interviewing skills, communication skills, training programs, characteristics of good leadership, how to evaluate employees, motivational strategies, writing job descriptions, and knowledge of labor unions. The course explores new and popular trends in business management. *(Option of Honors Credit)*

Dual credit is available through the College of DuPage for all gradesonly while taking the class at WBHS with a WBHS instructor.Prerequisite: NoneGrades: 10, 11, 12

Introduction to Business (Full-Year Course)

This course presents the everyday business activities that the student will experience in his or her own personal life. It is a general orientation course in the business field, including such topics for exploration as business careers, money management, investing, banking services, consumerism, and types of insurance. The course contributes to a better understanding of American business and where we as consumers and business persons will fit into this social and economic environment. **This course meets the consumer education graduation requirement, and therefore, cannot be taken if a student already passed consumer management.** Highly recommended for those who wish to pursue a career in the business field. *(Option of Honors Credit)*

Dual credit is available through the College of DuPage for all gradesonly while taking the class at WBHS with a WBHS instructor.Prerequisite: NoneGrades: All

Public Speaking & Communications / Technology (One Semester) (*Formerly Speech Tech) This course is a one-semester integrated English and Business Education course designed to teach students the basic elements of oral communication in combination with technology. Students will perform several different types of speeches utilizing presentation software. This course meets the speech graduation requirement. (Option of Honors Credit)

Dual credit is available through the College of DuPage for all gradeswhile taking the class at WBHS with a WBHS instructor.Prerequisite: NoneGrades: 10, 11, 12

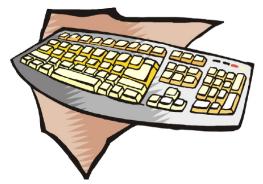
Keyboarding/ Word Processing 1 (One Semester)

This semester course is strongly recommended for college-bound students as well as those students interested in entering the workforce. The objective of this course is to develop the skills necessary to accurately keyboard and word process reports, letters, outlines, and a variety of materials that the individual may have occasion to use. This course develops the skills necessary to key and format material for personal, professional and school use quickly and accurately, as well as increasing speed and accuracy for online testing programs - including PARCC/SAT/ACT testing, college entrance exams, and online college courses. *(Option of Honors Credit)*

Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite: None

Grades: All



<u>Marketing – Sports and Entertainment Focus</u> (One Semester)

The student will study the four P's of marketing—product, price, promotion, distribution and how they relate to sales, advertising, and the production of goods and services in a sports/entertainment environment. Sales, promotion, consumer behavior, interviewing, and market research are broken down to show how these areas benefit the business world and the consumer. Students will practice their marketing skills by utilizing role playing and engaging in realistic business activities that occur in the sports and entertainment industries. Students have the opportunity to attend a field trip to the Kane County Cougars event or Chicago Wolves marketing event.

(Option of Honors Credit)

Dual credit is available through the College of DuPage for all gradesonly while taking the class at WBHS with a WBHS instructor.Prerequisite: NoneGrades: 10, 11, 12

CTE – Family and Consumer Sciences

Culinary Arts 1 (One Semester)

This course combines both a classroom setting and a laboratory experience. The course focuses on kitchen safety and sanitation, recipe selection and reading, food assembly techniques, and the nutritional value of basic recipes. This course is designed for both everyday cooking and those aspiring to work in the food service industry. ***Food Handler Certification**

Prerequisite: None

Culinary Arts 2 (One Semester)

This class expands upon the knowledge and culinary skills obtained in Culinary Arts I. Students will be reading and preparing more complex recipes involving the use of more difficult preparation techniques. Students will also be introduced to careers within the food service industry.

*Allergen Certification

Prerequisite: Culinary Arts 1

Culinary Arts 3 - The Brook Catering Co.

(Full-Year Course; One or Two Period Block; Repeatable as Advanced Chef) Students will learn how to operate a small catering business located at our high school. Course content will include food preparation including

plating and garnishing, serving food on occasion, and addressing the cleanup activities that follow. Students gain real life experience (and high school credits) as part of their school day. Activities include planning, scaling recipes, ordering of groceries, and figuring costs in a lab setting. Opportunities to work with clients to determine themes and menus for morning, afternoon and evening events will be included. Students are required to work

some hours before/after the school day throughout the semester as is typical in the Hospitality industry. This course is designed for students having an interest in food service as a possible career.

(Option of Honors Credit)

*Food Safety & Sanitation Managerial Certification. Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor. Prerequisite: Culinary Arts 1 & 2 Grades: 10, 11, 12

Grades: All



Culinary Arts 4 The Brook Catering Co. (Full-Year Course)

This 2nd level of Brook Catering Students in grades 10, 11, 12 will learn how to operate a small catering business located at the high school. Course content will include food preparation including plating and garnishing, serving food on occasion, and addressing the cleanup activities that follow. Students gain real life experience along with high school credit as part of their school day in both the front and back of the house. Activities include planning, scaling recipes, ordering of groceries, and figuring costs in a lab setting. Opportunities to work with clients to determine themes and menus for morning, afternoon, and evening events will be included. Students should expect to work some hours before/after the school day throughout the semester/year as is typical in the Hospitality industry. This course is designed for students having an interest in food service as a possible career. Food Safety and Sanitation Managerial Certification available. Industry certification opportunity available. *(Option of Honors Credit)*

Dual credit option is through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite: Culinary 1, 2, 3 or Consent of CTE Dept Head **Grades:** 10, 11, 12

Fitness & Nutrition (Full-Year Course; Repeatable)

This course is an inter-departmental course taught by Physical Education and Family & Consumer instructors. The focus of the course is upon physical fitness activities that can be pursued into adulthood and today's nutritional needs. Included topics are body composition testing, computer dietary analysis, laboratory experiences in nutritional food preparations and physical conditioning activities, like yoga. This course can fulfill daily PE requirement. (Option of Honors Credit)

Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite: Junior or Senior status

Grades: 11, 12

Human Growth and Child Development (One Semester)

Students explore topics focusing on child growth and care from conception through childhood with emphasis on the techniques and skills necessary to promote healthy physical, social, emotional, intellectual and moral development. This course incorporates concepts from child psychology, educational research, biology, sociology and philosophy. Students will spend a full weekend with a computerized baby to further their understanding of the care needed for an infant. Students have an opportunity to attend field trips to Elmhurst Hospital Labor and Delivery unit. ***2 Certificates in alignment with the** *Gateways to Opportunity ECE Program* (www.ilgateways.com).

-Shaken Baby Syndrome Prevention Certificate -Sudden Infant Death Syndrome Prevention Certificate

Prerequisite: None

Grades: All



Preschool 1 (One Semester)

Students will apply the knowledge that they learned in Human Growth and Child Development, in the preschool lab setting. Children from the community attend the Little Warrior Preschool which is directed by the course instructor, a lead teacher and the assistance of the high school students. Students will have the opportunity to observe the preschoolers as well as work with each child on a one-on-one basis. The course curriculum includes positive guidance techniques, observation skills, reflection and additional information that can be used in Preschool II and a future career related to young children.*Scholarship Opportunity available. *4 Certificates in alignment with the *Gateways to Opportunity ECE Program* (www.ilgateways.com).

-Gateway ECE Level 1

-Mandated Reporting

-Poison Prevention

-Lead in the Water

Prerequisite:Human Growth and Child Development, 2- ECE Certificates **Grades:** All

Preschool 2 (One Semester)

This course focuses on Preschool Practicum. Students will research, explore and implement the most current teaching trends and techniques for children with a variety of needs in The Little Warrior Preschool. Students will apply the knowledge and practice the skills gained in previous courses. Students will gain further knowledge about a career in education and other child related professions.

Prerequisite: Preschool 1 and 4 ECE Gateways Certificates **Grades:** 10, 11, 12 **Recommended Public Speaking & Communications Technology*



Preschool Teaching Internship (One Semester)

This internship opportunity is given to those students who have successfully completed Human Growth and Child Development, Preschool I and Preschool II and have been given permission, after an application process, to enroll in this course. As an advanced continuation of Preschool II, the student works as an individual lead teacher in the Little Warrior Preschool acting as a facilitator to those students enrolled in Preschool I. The student will further their education and knowledge in working with young children by conducting research, observing, planning, implementing and individual reflection. The student will work closely with the classroom teacher who will guide them throughout the course. Students have an opportunity to attend Easter Seals or a local Early Childcare Facility. *(Option of Honors Credit)*

*AED, CPR, First Aid Certification

Prerequisite: Preschool 2 and teacher approvalGrades: 11, 12*Recommended Public Speaking & Communications Technology

Fashion & Apparel Design (One Semester)

This hands-on, performance based class is designed for the student interested in all aspects of the fashion apparel industry. Emphasis is upon fashion trends, methods of basic fashion design, design principles, color theory, and personal fashion analysis. Using the skill of sketching for a variety of garments, students will design a fashion line as their final project.

Prerequisite: None

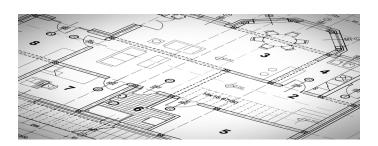
Grades: All



Interior Design (One Semester)

This performance based course is designed for the student interested in the study of interior design. Emphasis is upon the application of art design principles to achieve effective interiors. Units of study include: personal needs and housing, historical development, consumer issues, elements and principles of design, floor plans, and construction basics used in the interior design industry.

Prerequisite: None



Education Teacher Preparation 1 (One semester DOUBLE BLOCK)

Students will be provided an introduction to teaching as a profession in the American education system, offering a variety of perspectives on education, including historical, philosophical, social, legal, and ethical issues in a diverse society. The course includes organization structure and school governance. A 20-hour field experience is required and will be coordinated from the high school level as a part of the dual credit and industry credential provided. Students will have the opportunity to complete their observation hours at a variety of K-12 classrooms including General and Special Education programs. Students must enroll for the double block. *(Option of Honors Credit)*

Industry certification opportunity available. Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite:Recommended successful completion of Preschool Internship or CTE Dept Head approval.Grades:11, 12

Education Teacher Preparation 2 (One semester DOUBLE BLOCK)

Students will examine various policies, procedures, and routine activities that are part of the teacher's role as the second course in the Education Pathway. This is a field experience course with each student spending a minimum of twenty clock hours in a classroom. Weekly seminars focus on the development of human relations and problem solving skills necessary for an effective classroom. Students will have the opportunity to complete their clinical hours at a variety of K-12 classrooms, including General and Special Education and therefore must enroll for the double block. Students will also have the opportunity to complete 40 hours of clinicals to qualify for the Education Pathway Endorsement at ISBE and 6 hours of dual credit if they also completed the EDUC 1100 and other requirements.

(Option of Honors Credit)

Industry certification opportunity available. Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite: Education Teacher Prep 1 Recommended **Grades:** 11, 12

CTE students who qualify and are enrolled in the following capstone courses may be exempt from one year of science credit for D88 graduation after two science credits are earned. SEE your counselor or CTE Department Head for more information. These capstones include:

- Culinary Arts 3 (Brook Catering) CA 1120
- Culinary Arts 4 (Brook Catering) CA 1120
- Ed Pathways Education Teacher Preparation 1 EDUC 1100
- Ed Pathways Education Teacher Preparation 2 EDUC 1101
- Automotive 3, 4 or 5 (5 CERTIFICATES)
- CTE Youth Apprenticeship OSHA 10 -Manfacturing/Engineering/IT/Auto/Education
- PLTW Digital Electronics (university credits)



CTE Youth Apprenticeship

(Full-Year course DOUBLE BLOCK)

This course is geared towards juniors and seniors who are choosing career paths in career and technical education fields, including: engineering, precision manufacturing, cybersecurity, computer programming, computer hardware and software design, early childcare, education, automotive and construction in the CTE fields of business, hospitality, and more. This is a double block course that includes a release period for students to attend a paid apprenticeship at a local company. Students will learn about different aspects of the manufacturing process and have the opportunity to earn career certifications, complete resume and interview skills during the classroom portion. Prior CTE coursework including OFTI 1250 and BSNS 1111 highly recommended. Students must provide their own transportation.

(Option of Honors Credit)

Prerequisite: 2 or more semesters of CTE credit successfully completed. **Grades:** 11-12

CTE – Industry and Technology

Architectural Drafting & Design 1 (One Semester)

This course will explore the options, careers, education and skills related to architecture and building construction. It will focus primarily on residential design and the required drawings for constructing buildings ranging from as small as a shed or garage up to large houses. Topics will include building codes, construction plans, room layouts, roofing and more. Students will learn principles of CAD Drafting software and design as well as modeling with balsa wood and foam core board. *(Option of Honors Credit)*

Prerequisite: None

Grades: All



Architectural Drafting & Design 2 (One Semester)

This course will explore the fundamentals of hand drafting and architectural conventions. This will include the use of tools, lettering, dimensioning, and drafting techniques, and frame construction vocabulary and expanded terminology. Students will expand their principles of CAD Drafting software and design as well as modeling with wood, boards, hand drawings, dimensional drafting, and architectural plans, as well as drafting techniques, foundational plans, wall and stair sections, and exterior elevations. This course will build upon the Auto-CAD drawing students will learn to create in Architectural Drafting. *(Option of Honors Credit)*

Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS Instructor.

Prerequisite: Arch Drafting 1



IED, POE, and DE offer scholarships and university credit unique to certain colleges and universities both in and out of the state of Illinois. * Each student should see his/her advisor to make the best college credit transition for these courses.

PROJECT LEAD THE WAY courses lead to free College Credit/ Accreditation at many schools across the USA, including but not limited to:

MILWAUKEE SCHOOL OF ENGINEERING UNIVERSITY OF ILLINOIS NORTHERN ILLINOIS UNIVERSITY ILLINOIS STATE UNIVERSITY UNIVERSITY OF IL AT CHICAGO PURDUE UNIVERSITY INDIANA UNIVERSITY IOWA STATE UNIVERSITY UNIVERSITY OF IOWA DUKE UNIVERSITY MISSOURI UNIVERSITY OF SCIENCE AND TECH UNIVERSITY OF SOUTH CAROLINA

For student opportunites; www.pltw.org/experience-pltw/student-opportunities

Transferable credit for Willowbrook High School is generally 3 credit per class. Check with your university for the most updated information.

Introduction to Engineering Design (IED) (Full-Year Course)

Introduction to Engineering Design (IED) is a high school level course for students who are interested in design and engineering. The major focus of the IED course is to expose students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED gives students the opportunity to develop skills and understanding of course concepts through activity-project, and problem-based (APPB) learning. Students will employ engineering and scientific concepts in the solution of engineering design problems. In addition, students use Auto Desk INVENTOR, a 3D solid modeling design software package, to help them design solutions to solve proposed problems. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges that increase in difficulty throughout the course. *University credit available*. *(Option of Honors Credit)*

Prerequisite: None

Principles of Engineering (POE) (Full-Year Course)

Principles of Engineering (POE) exposes students to major concepts they will encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics. Students

develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions, along with utilization of a 3D printer and APPB learning. This course will lead to paths of other specializations, including aerospace, biotechnical, civil engineering

and architecture, computer integrated manufacturing, digital electronics, and engineering design and development. *University credit available.* (Option of Honors Credit) *G-Suite Certification

Prerequisite: C or better in algebra or consent of CTE Department Chair: Introduction to Engineering Design recommended but not required **Grade:** 10, 11, 12



Digital Electronics (DE) (Full Year Course)

A PLTW course where Students learn important aspects of development and implementation of electronic components. They apply math, science, and standard engineering practices to design electrical circuits using technology such as robots, sensors and motor controls in STEM. Students are introduced to the process of combinational and sequential logic design, engineering standards and technical documentation. They are also exposed to programming integrated circuit kits and microcontrollers. *University credit available. (Option of Honors credit)*

Prerequisite: IED or one semester of Computer Repair or consent of CTE Department Chair.

Grades: 10, 11, 12



Computer Repair - Servicing 1 (One Semester)

This course is designed to equip beginner and semi-experienced students with entry-level computer technician proficiencies. The course follows CompTIA A+ Certification objectives for computer hardware. Students will become proficient with computer hardware components including the motherboard, processor, memory, drives, power supplies and other devices. Classroom activities include demonstrations, videos and lab work to help master the theory and operation of computer hardware. This course follows industry-recognized curriculum and is strongly recommended for students who have an interest in pursuing Computer Servicing and Technology as a career or as a computer enthusiast. *(Option of Honors Credit)*

Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite: None

Computer Repair-Servicing 2 (One Semester)

This course will build upon the computer repair and servicing to computer and hardware maintenance, troubleshooting, and servicing with modern personal computer systems. Emphasis will be on advanced hardware, operating systems, troubleshooting, networks, printers, and other peripheral devices. Prepares the student for the CompTIA A+ exam - the international industry credential that validates the knowledge of Computer Service Technicians. Career concentrations that benefit from CompTIA A+ training include Network Infrastructure, Programming, and Technical Writing. This course follows industry and university recognized curriculum and is strongly recommended for students who will pursue Computer Hardware and Maintenance Careers or are computer enthusiasts. *(Option of Honors Credit)*

Dual credit is available through the College of DuPage while taking this class at WBHS with a WBHS instructor. *A+ certification

Prerequisite: Computer Repair- Servicing 1

Grades: All



Digital Imaging (One Semester)

Students will explore the many application of digital media. The focus in the class will include capturing still life in a studio setting, pixel manipulation, processing, compression, storage, printing and professional display of images. Time will be spent in learning how to edit and use still shots to create original composites. The Adobe Creative Suite with a strong emphasis in Adobe Photoshop and Adobe Lightroom will be used in the production of projects. *(Option of Honors Credit)*

Dual credit is available through the College of DuPage while taking this class at WBHS with a WBHS instructor.

Prerequisite: None

Photography 1 (One Semester)

This course will cover the technical area of photography including both black and white film and digital photography. This course stresses the proper practices and techniques as they apply to taking and printing quality photographs. Students will learn how to use Adobe Photoshop to edit, process and print high quality, professional photographs. (Option of Honors Credit)

Dual credit is available through the College of DuPage while taking the class at WBHS with a WBHS instructor.

Prerequisite: None

Grades: All



<u>Photography 2</u> (One Semester)

Advanced Photography continues to build on the previously acquired skills. Students will learn advanced techniques in both black and white film and digital photography. Students will work with studio and commercial lighting as well as learn the proper techniques for flash photography. Advanced Adobe Photoshop techniques will be taught throughout the semester. (Option of Honors Credit)

Dual credit is available through the College of DuPage for while taking the class at WBHS with a WBHS instructor.

Prerequisite: Photography 1

<u>Screen Printing 1</u> (One Semester)

Screen Printing is offered as an introductory course in Graphic Communications. This course includes study and projects in the areas of layout and design, computer-assisted design (Adobe Illustrator), desktop publishing, with an emphasis in screen printing. Screen printing is a process that is used to create prints on a wide variety of materials, from fabric to wood. Many commercial printers use screening to print, due to cost factors and ease of use and can result in high quality prints. Screen printing is widely used today to create many mass or large batch produced graphics such as posters, clothing designs, or displays.

Prerequisite: None

Grades: All



Screen Printing and Production 2 (One Semester)

This course is a continuation of Screen Printing with a greater emphasis on equipment operation, long run production, and the creation of professional screen print designs. Varying levels of specialization are undertaken with emphasis upon the area of the student's choice. Activities and projects will allow students to develop the skills necessary to seek employment in the field of Graphic Communications. After a general level of competency is achieved, specific advanced skill development can be directed into the following areas: desktop publishing, design and screen-printing. Basic math computation skills and the ability to read a ruler are recommended.

Prerequisite: Screen Printing 1

<u>Automotive Upkeep</u> (One Semester)

Do you plan on owning a car? This course is designed to introduce students to the basic operation and maintenance of the automobile. Topics covered will be beneficial to ALL current and future car owners, both male and female, and will provide students with the skills necessary for owning and maintaining a car. This course will include classroom demonstrations and lab activities including oil changes, under the hood inspections, under the car inspections, changing and rotating tires, replacement of essential maintenance parts on an automobile, and how to properly care for your vehicle. This is the first step to owning a vehicle. *(Option of Honors Credit)*

Possible dual credit available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite: None

Grades: All



<u>Automotive Technology 1</u> (Full-Year Course)

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. +Alignment with NATEF Standards. (Option of Honors Credit)

Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite: None

<u>Automotive Technology 2</u> (Full-Year Course)

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.+Alignment with NATEF Standards. (Option of Honors Credit)

Dual credit is available through the College of DuPage for all grades only while taking the class at WBHS with a WBHS instructor.

Prerequisite: Automotive Technology 1 Grades: 10, 11, 12

<u>Automotive Technology 3/Internship</u> (Full-Year Course)

(One or Two Period Block)

This is an advanced level course providing a study of design and construction of automotive technology and practical experiences in automotive repair. Areas of study include driveline systems including manual and automatic transmissions, A/C system diagnosis and repair, and Engine performance diagnosis. This course allows students who are interested in a career in automotive repair and maintenance to gain additional knowledge and experience in an area of particular interest. In Auto Tech III, students put into practice what they have learned and run a service center repairing "customer vehicles."+Alignment with NATEF Standards. *Engine Competition, *Skills USA *EPA 609, *5-ASE Certifications.

Prerequisite: Automotive Technology 2 Grade: 11, 12

<u>Automotive Technology 4/5</u> (Full-Year Courses) (Two Period Blocks)

These are advanced level courses for 12th graders who have completed Auto III. Students apply their experiences and knowledge as they run a service center on live vehicles under the guidance of their instructor. (Option of Honors Credit) +Alignment with NATEF Standards, *Engine Competition, *Skills USA *3-ASE Certifications

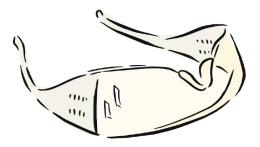
Prerequisite: Automotive Technology 3 Gra

Woods 1 (One Semester)

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. Through the completion of projects and classroom activities, students will learn and improve skills in safety, organization, basic math, project planning, and reading. These skills establish a foundation for advanced woods, careers in the building trades, and/or an introduction to a rewarding hobby. Safety glasses are required. *(Option of Honors Credit)*

Prerequisite: None

Grades: All



Woods 2 (One Semester)

The course is a continuation of Woods I where students will enhance their woodworking skills by creating more complex projects that require them to follow proper project planning guidelines, safety procedures, machine operation techniques, and finishing techniques. Students will work on teacher approved projects throughout the semester. This is primarily a hands-on lab activity course with projects to reinforce student learning. All projects must get approval by the instructor before students begin work. Students are required to pay for the materials they use in class; price will vary depending on project and wood used. Safety glasses are required. *(Option of Honors Credit)*

Prerequisite: Woods 1

Woods 3/Independent Study (One Semester)

This course is a continuation of Woods 1 & 2 where students will enhance their woodworking skills by focusing on the production part of woodworking, learning how to design and create projects to be mass produced. Students will learn the importance of creating a prototype and then making jigs and fixtures to make the process more efficient. This will require them to follow proper project planning guidelines, safety procedures, machine operation techniques, and finishing techniques. Students will continue earning certification on specific machines through the *Woodworkers Career Alliance*. This is primarily a hands-on lab activity course with projects to reinforce student learning. Students are required to pay for the materials they use in class; price will vary depending on project and wood used. Safety glasses are required. *(Option of Honors Credit)*

Prerequisite: Woods 2

Building Trades 1 (One Semester)

This course is designed for students interested in doing some of their

own home maintenance and repair work

or those who may be interested in learning

about a career in the building trades.

Students learn the basic information and techniques necessary to use the major tools

and various building materials required for routine repair and maintenance of

a residential structure and its systems,

including exterior and interior walls, tiling,

drywall, plumbing, masonry, and insulation.

Students will work independently, in a large group, or in pairs while processing individual units of study throughout this course.

*OSHA 10 Construction Certificate

Prerequisite: None

Building Trades 2 (One Semester)

Students will build upon this knowledge in Building Trades 2 and advance their skills in the areas above.

Prerequisite: Building Trades 1



Grades: 10-12

Grades: All

CTE Peer Leader & Exploration Opportunities

<u>CTE Internship</u> (One Semester)

This course is designed to provide opportunities for life and career skills through the exploration of a variety of career and technical learning experiences. This course for the leaders is part of the Pathways to Education program to prepare future K-12 teachers. The Interns will serve as peer leaders and will learn interpersonal and intrapersonal communication skills as they facilitate CTE labs. This course is highly recommended for those students interested in pursuing a career in the education field. *(Option of Honors Credit)*

Prerequisite: Preschool 2 or Department Head Approval Grades: 11,12

IT Explorations (One Semester)

This course is designed to provide opportunities for life and career skills through the exploration of a variety of career and technical learning experiences. This course will be aligned to students' transition goals and will scaffold student job-readiness for career coaching experiences in the community. This course will include students in a variety of skill levels who will work together and is highly recommended for students interested in pursuing a career in an Industry, Technology, Manufacturing or other CTE field. Students may wish to take Screen Printing, Woods 1, Auto 1, Photo 1 and other CTE courses after finding success in this exploration course.

Prerequisite: None

Grades: 9-12

<u>Culinary Explorations</u> (One Semester)

This course is designed to provide opportunities for life and career skills through the exploration of a variety of culinary learning experiences. Students will learn interpersonal and intrapersonal communication skills as they facilitate culinary labs. This course is highly recommended for those students interested in pursuing a career in culinary, food prep or restaurant fields. Students may wish to take Culinary 1, Fitness and Nutrition, or other CTE courses after this exploration course.

Prerequisite: None

Grades: 9-12

CTE IS THE PLACE TO BE



"Equal educational and extracurricular opportunities are available to all students without regard to race, color, nationality, sex, sexual orientation, gender identity, ancestry, age, religious beliefs, physical or mental disability, status as homeless, or actual or potential martial or parental status, including pregnancy and to the Boy Scouts and other designated youth groups. No student shall, based on sex or sexual orientation, be denied equal access to programs, activities, services, or benefits or be limited in the exercise of any right, privilege, advantage, or denied equal access to educational and extracurricular programs and activities."

Career and Technical Education Department

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