

Course Code	CTE Course	Credits	Grades	Course Description	SCED
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612 **Wildcats Business

" 0.5 9-12 This introductory course surveys an array of topics and concepts related to the field of business. These courses introduce business concepts such as banking and finance, the role of government in business, consumerism, credit, investment, and management. They usually provide a brief overview of the U.S. economic system, small businesses, and corporate organizations. Introductory Business courses may also expose students to the varied opportunities in administration, accounting, management, and related fields. 12 051

606 **Accounting 1

Prerequisite: Wildcats Business for 9th & 10th graders" 0.5 9-12 Provides complete coverage of service and merchandising businesses with two different types of ownership structures-proprietorships and partnerships. Each type of business is presented in a complete accounting cycle covering the analyzing of transactions into debit and credit accounts, journalizing, posting, cash control systems, financial statements and adjusting and closing entries. Accounting concepts are introduced using a modern business with owners that students can relate to in each cycle. 12-104

607 "Accounting 2

Prerequisite: Accounting 1" 1 10-12 Begins with a business simulation in which students perform all of the tasks covered in Accounting 1. The remainder of the course is dedicated to the study of accounting tasks that must be performed by or for a corporation. The advantages and disadvantages of this type of ownership are discussed as well as a brief overview of the stock market. In Accounting 2, students perform all of the accounting tasks and activities in the accounting cycle for a corporation. During the final marking period in this course students will be introduced to an automated accounting system in which they will use their knowledge of the accounting process to record, journalize and post transactions as well as generate financial reports in a fast and effective manner. Solving problems, making decisions and reasoning effectively are used throughout this course. 12108

604 **Business Management 1

Prerequisite: Wildcats Business for 9th & 10th graders" 0.5 9-12 Business Management 1 acquaints students with management opportunities and effective human relations. BM1 provide students with the skills to perform planning, staffing, financing, and controlling functions within a business. In addition, BM1 provides a macro-level study of the business world, including business structure and finance, and the interconnections among industry, government, and the global economy. This course also emphasizes problem-based, real-world applications of business concepts and use accounting concepts to formulate, analyze, and evaluate business decisions. 12 052

605 "*Business Management 2

Prerequisite: Business Management 1" 0.5 10-12 Business Management 2 helps students develop the knowledge and skills necessary to own and operate their own businesses. The course content covers topics from a number of fields: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, communication, information management, risk management, and strategic management. Several topics surveyed in Business Management 1 are also included as well as Entrepreneurial skills. 12-053

677 "*Personal Finance

Prerequisite: Wildcats Business for 9th & 10th graders" 0.5 10-12 This course provides students with an understanding of the concepts and principles involved in managing one's personal finances. These courses emphasize lifespan goal-setting, individual and family decisionmaking, and consumer rights as well as topics that are commonly associated with personal finance so that one can become a financially responsible consumer. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. This course may also investigate the effects of the global economy on consumers and the family. 19 262

6678 "*Investing & The Stock Market

Prerequisite: Personal Finance" 0.5 10-12 This course emphasizes the formulation of business and individual investment decisions by comparing and contrasting the investment qualities of cash, stock, bonds, and mutual funds. Students typically review annual reports, predict growth rates, and analyze trends. Stock market simulations are often incorporated into these courses. 12 107

669 "*Marketing 1

Prerequisite: Wildcats Business for 9th & 10th graders" 0.5 9-12 Marketing 1 offers students insight into the processes affecting the flow of goods and services from the producer to the consumer. Course content ranges considerably as general marketing principles such as purchasing, distribution, and sales are covered; however, a major emphasis is often placed on kinds of markets; market identification; product planning, packaging, and pricing; and business management. 12 164

682 "*Marketing 2

Prerequisite: Marketing 1" 1 10-12 Marketing 2, deals with the marketing function of the firm primarily from the management standpoint. Topics include marketing strategy, new products, channels of distribution, pricing, and promotion. The function of the marketing institution in economic and social context is considered. 12 152

684 Foundations of Health 1 10-11 This course is part of the health services core designed to provide the student with an in-depth knowledge of the body systems. Students expand their knowledge of the health care system and associated occupations. Emphasis is placed on communication and interpersonal skills, use of technology, legal and ethical responsibilities including HIPAA, workplace safety OSHA and the development of critical thinking, medical terminology and vital signs. 14 001

676 "Nurse Assistant CNA

Prerequisite: Foundations of Health

Periods 1,2,3" 1 11 Students in this course will participate in academic and skill mastery, roles and responsibilities of the nurse assistant, patient care skills, geriatric care, safety and comfort, infection control, vital signs, and patient assessments 14 051

676C "***Nurse Assistant CNA Clinical

Prerequisite: Foundations of Health

(Taken concurrently with Nurse Assistant CNA)

Periods 1,2,3" 2 11 Students will participate in "hands on" patient care weekly. Combined with 676 the students complete the mandatory 100 hours of combined academic and clinical experience required by the State of Connecticut DPH. Students successfully meeting course requirements will be eligible to take the CT Prometric Certified Nurse Assistant exam for industry certification which is strongly recommended for students who wish to enter into nursing. 14 098

6677 "****Health Science Careers. Runs in Fall and Spring

Prerequisite: Nurse Assistant CNA Courses

Periods 1,2,3" 1.5 12 This course provides students with work experience in fields related to therapeutic services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). This course also includes classroom activities that provides opportunities for further study of the field and discussion regarding experiences that students encounter in the workplace.

14098

690U "***Introduction to Allied Health Professions UCONN

(Double Period semester)

Run in Fall and Spring

Prerequisite: Nurse Assistant CNA/Clinical)" 1 12 This UCONN ECE course will offer 11th grade students an overview of allied health professions. A variety of allied health professions will be highlighted. Allied health professionals will be invited to describe their work/general duties and responsibilities of the profession, the work environment, educational requirements and employment trends. By investigating various professions in allied health, students will have the opportunity to make informed college and career decisions.

683 ***Medical Terminology (Double Period semester)

Run in Fall and Spring

Prerequisite: Nurse Assistant CNA/Clinical)" 1 12 This Medical Terminology course provides an introduction to and mastery of medical terminology through presentation of word roots, prefixes and suffixes. It provides meanings for these medical terms in the context of the structure and function of the human body.
14 063

747 *Aviation & Flight Sciences 1 0.5 9-12 This high-flying STEM experience was designed by veteran pilots and aerospace engineers as the single most comprehensive, engaging, and dynamic aviation curriculum available to high school students! The primary objective of the AFS progression is to put high school math and science classes into applied context through the thrilling real-world framework of aviation. The secondary objective is to equip students with key college & career soft skills including critical thinking, public speaking, task management, and effective teamwork & communication. Through extensive ground school studies and strenuous flight training on highly-realistic desktop simulators, graduates of this course will be able to boast a significant portion of the same training civilian and military pilot candidates receive in flight school without leaving the safety of the classroom environment 21 013

748 **Drone Technology & Engineering

Prerequisite: Aviation & Flight 1" 0.5 9-12 In this flagship curriculum, the Milestone C team of aerospace professionals employ cutting-edge technologies and techniques to equip students with key professional skills pertinent not only to the drone industry, but also engineering at large. DTE students will learn about basic aerodynamics, unmanned aircraft architecture, and drone flight dynamics before applying the engineering process to design, build, and test fly their own drones in small teams, emulating a real-world aerospace engineering program from beginning to end. Following requirements analysis, design, manufacturing, and flight test, DTE students will embark on an engineering modification program, integrating wireless cameras and First-Person View (FPV) piloting systems on their drones. This one-of-a-kind aerospace experience culminates in a drone challenge, allowing student teams to compete against each other by applying the knowledge, skills, and experience gained during the course. 21 990

749 **Drone Operator Prep

Prerequisite: Drone Technology" 0.5 10-12 The emergence of drones in everyday life has captured this generation's imagination and remotely-piloted systems are undoubtedly the way of the future! It is estimated there will be 100,000 new civilian unmanned aircraft jobs available by 2025 with an economic impact of 85 billion dollars. DOP focuses on drone aerodynamics, design architecture, careers, and offers extensive flight training opportunities on highly-realistic drone simulators. This curriculum also serves as an intensive FAA test prep course for students who wish to become licensed commercial drone operators. In a truly unique combination, DOP creates a hands-on laboratory environment for students to apply their previous STEM knowledge while opening doors for lucrative and prestigious future career opportunities. 21 999

744 **Aviation & Flight Sciences 2

Prerequisite: Drone Operator Prep" 0.5 10-12 AFS – Level 2 builds on the Level 1 foundation as the ultimate hands-on laboratory for students to apply conceptual math, physics, and life sciences topics hands on, in the real-world context of aviation. The overarching focus of this course is to develop student ability to rapidly visualize and solve complex problems in 3 dimensions by using high school math and science fundamentals. Furthermore, students will be introduced to the aeronautical design process to broaden their horizons in engineering career fields and opportunities. 21 013

763 *Conceptual Engineering Milestones 0.5 9-12 Designed by professionals with over 50 years of combined experience as Fortune 500 engineers and engineering managers, this course serves as a broad introduction to the world of corporate engineering. CEM is a horizon-broadening experience as much as a project-based laboratory to practice key professional skills required in all 21st century STEM industries including critical thinking, public speaking, task management, and effective teamwork & communication. Through a series of conceptual small-team projects culminating in a hands-on final project, CEM will test the limits of all students' critical-thinking and collaborative abilities. The primary objective is to open students' eyes to the wide variety of career opportunities available to them in 21st century engineering, how to pursue them, and what day-to-day life as a corporate engineer may entail. 21 004

764 **Engineering Design Project

Prerequisite: Conceptual Engineering" 0.5 9-12 This course is the brainchild of engineers educated under the CDIO (Conceived-Design-ImplementOperate) Initiative developed at MIT in the late 1990s. The CDIO approach uses active learning tools, such as group projects and problem-based learning, to better equip engineering students with technical knowledge as well as communication and professional skills. Milestone C's EDP curriculum has been carefully crafted with a sharp technical focus to groom future design engineers. Student teams will embark on an extended design project emulating a real-world engineering program complete with requirements analysis, milestone reviews, schedule and budget management, and a detailed test program prior to fielding a complex, physical end-product. Students will benefit from the technical and soft skills acquired during this course for years to come, regardless of the career path they choose. 21 006

766 *Software Development 1 0.5 9-12 In today's global technology network, software is the single common thread tying all disciplines together. All STEM industries, without exception, benefit from the efforts of software developers, engineers, and integrators on a daily basis. This lightning-paced course will introduce students to how corporate software projects are developed, managed, integrated, and fielded. An interface-oriented approach to software development eliminates the need for any prior coding experience. Students will navigate this complex world following a project-based roadmap and leave with a significant sense of accomplishment and key professional skills after creating professional-caliber apps, games, and control algorithms. SD graduates will establish a solid foundation in software development principles. More importantly, they will gain big-picture understanding of interface management and the engineering process at large. 21 059

768 "*Software Development 2

Prerequisite: Software Development 1" 0.5 9-12 Having gained knowledge in SD 1, students are thrust into a software development project to further their understanding, problem solving and teamwork skills. They will need to rely on team members to do their parts in order to complete the scope of the project on schedule. The students will gain a deep understanding of larger projects that incorporate software and harder integration to allow them to succeed in their future careers no matter what discipline or industry they end up in. 10-152

754 "*Advanced Construction 4

Prerequisite: Construction 3" 0.5 10-12 The Advanced Construction 4 course focuses on residential construction principles and their relationship to commercial applications. Topics typically covered include commercial concrete forming, reinforcement and placement methods, stair construction, metal framing, interior finishes, suspended ceiling systems, metal framing and drywall applications, and commercial roofing methods and systems. This course begins NCCER Carpentry Level 2 of Framing and Finishing. 17-013

752 "*Construction 3

Prerequisite: Construction 2" 0.5 10-12 Construction 3 provides students with information related to the building of wooden structures, enabling students to gain an understanding of wood grades and construction methods and to learn skills such as laying sills and joists; erecting sills and rafters; applying sheathing, siding, and shingles; setting door jambs; and hanging doors. Carpentry courses may teach skills for rough construction, finish work, or both. Students learn to read blueprints, draft, use tools and machines properly and safely, erect buildings from construction lumber, perform finish work inside of buildings, and do limited cabinet work. Carpentry courses may also include career exploration, good work habits, and employability skills. Construction 3 completes NCCER Level 1 Carpentry modules. 17-003

751 "*Construction 2

Prerequisite: Construction 1" 0.5 9-12 Construction 2 focuses on carpentry skills and provides information related to the building of wooden structures, enabling students to gain an understanding of wood grades and construction methods and to learn skills such as laying sills and joists; erecting sills and rafters; applying sheathing, siding, and shingles; setting door jambs; and hanging doors. Carpentry courses may teach skills for rough construction, finish work, or both. Students learn to read blueprints, draft, use tools and machines properly and safely, erect buildings from construction lumber, perform finish work inside of buildings, and do limited cabinet work. Carpentry courses may also include career exploration, good work habits, and employability skills. Construction 2 starts addressing modules in the NCCER Level 1 Carpentry curriculum.

17 003

750 *Construction 10.5 9-12 Construction 1 introduces students to the various kinds of woods used in industry and offers experiences in using selected woodworking tools. Correct and safe use of tools and equipment is emphasized. As students advance, they focus on learning the terminology necessary to use power tools successfully, developing skills to safely use these tools in the workshop and becoming familiar with various kinds of wood-finishing materials. This course begins a students career pathway in Constrcution by completing the Core Curriculum certified by NCCER (National Center for Construction Education & Research) and IMTI (Industrial Management & Training Institute) 17-006

825 *Child Development 0.5 9-12 Child Development engages students in the study of the social, emotional , moral and physical development of children ages three through twelve. This course focuses on brain development, communication and the importance of providing quality learning experiences in children. Studetns will also be exposed to dealing with childrens disabilities and an introduction to setting up an early childhood classroom. 19255

822 *Early Childhood Education 0.5 9-12 This course focuses on how to work with children in an educational setting concentrating on the preschool aged child. Development theories, principals, and teaching strategies will be discussed along with how to enhance development through age appropriate activities. 19154

8001 **Teacher Prep 1

Prerequisite: Child Development " 0.5 10-12 Teacher Prep 1 addresses child development and education issues, so that students can guide the development of children in educational settings. TP1 includes the planning and implementing of developmentally appropriate learning activities, health and safety practices, safe learning environments, and legal requirements for teaching young children. 19-153

8002 **Teacher Prep 2

Prerequisite: Teacher Prep 1" 0.5 10-12 Teacher Prep 2 introduces students to the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. TP2 exposes students to and train them in classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in the field of education. 19-151

8003 **Teacher Prep 3

Prerequisite: Teacher Prep 2" 0.5 11-12 Teacher Prep 3 addresses the implementation of technical devices and processes that are used to improve and facilitate learning. Content includes, but is not limited to, productivity tools, interactive multimedia, communications, educational software and hardware, instructional applications, and ethical, legal, social, and professional issues. 19-155

8004 "*Teacher Prep 4

Prerequisite: Teacher Prep 3" 0.5 11-12 Teacher Prep 4 prepares students to teach and guide others. TP3 provides opportunities for students to develop their own teaching objectives, to design lesson plans, and to experience teaching in a controlled environment. Students examine and practice teaching strategies, learning styles, time management and planning strategies, presentation and questioning skills, classroom management, and evaluation techniques. 19-152

860U "Individual & Family Development UCONN

Prerequisite: Child Development" 1 11-12 With successful completion of this course, students will receive 3 credits from the University of Connecticut. This is a required course for Family Studies, Nursing, and Education majors at UCONN and other colleges. Credits can also be transferred to other colleges as a Life-span Development Psychology course. This course is designed as an introduction to the field of Human Development and Family Relations. In particular, the course will focus on the developing individual within the context of the family system over the life-span from prenatal to old age and dying. Students will be required to do job shadowing and internships beyond the classroom. A college text will be used. Students must be in good standing academically to take this course. 19-299

720 *Graphics Communications 1 0.5 9-12 Graphic Communications is a course of study of the processes used in the graphic communication profession. It is the exchange of information in a visual form, such as words, drawings, photographs, or a combination of these in both printed and electronic form. Students will learn computer applications, the use of varied equipment, and they will incorporate the use of the Internet as a resource in their projects. 11-002

722 "*Graphics Communications 2

Prerequisite: Graphics Communications 1" 0.5 9-12 Students receive more advanced instruction in desktop publishing and offset printing, including job planning and layout. Students will study web design, web page development and manage a school website. They will learn job related skills in this industry through hands-on activities that print items for the school. Students will explore career opportunities in the printing and graphic fields. 11-152

727 Video Production 1 1 9-12 Video Production 1 is designed to introduce students to the use of video production technology. The course will focus on the use of cameras and related equipment to produce live and scripted video and to solve technical problems associated with the production process. Through the use of our studio and its equipment, we will develop skills involved in the various roles associated with a video production studio. We will also be involved in maintaining the proper and continuous broadcasting of video on the local education channel via cable. The editing process will incorporate many current techniques employed in both digital and linear modes. A large emphasis is placed on leveraging Marketing and how both content areas work together in the real world. 11-055

728 "Video Production 2

Prerequisite: Video Production 1" 1 9-12 In Video Production 2, students continue the technical and script writing skills learned in Video Production 1. Students are engaged in a rigorous program that enhances all skill sets learned in VP1. 11-055

740 *Automotive 1 0.5 9-12 This course covers the theory behind an internal combustion engine. Students will learn this theory and apply it to the disassembly, cleaning, stripping, painting, repair, and reassembly of a small 4-stroke-cycle engine. Basic tool skills, personal responsibility, positive attitude, and lab safety will be stressed. 20-103

741 "**Automotive 2

Prerequisite: Automotive 1" 0.5 9-12 Automotive Technology 2 continues with the learning concepts from Automotive 1 and builds upon the skills needed to keep current in the automotive industry. Students will continue to develop knowledge of the different transportation systems and learn through hands-on activities how to use different automobile equipment in repairing automobiles. 20-106

745 "Advanced Automotive 3

Prerequisite: Automotive 2" 1 10-12 Advanced Automotive Technology will expand upon the depth of the content in understanding built in Automotive 1 and 2 as well as introduce more complex contents as noted in the topic listing. 20-104

798 "Manufacturing 1 NVCC

" 2 11 Machining courses enable students to design and manufacture metal parts using various machine tools and equipment. Course content may include interpreting specifications using blueprints; preparing and using manual and computer numerical controlled (CNC) lathes and milling machines, shapers, and grinders with skill, safety, and precision; maintenance; developing part specifications; and selecting appropriate materials. Advanced course topics may include quality control; statistical process control; and application of measurements, metalworking theory, and properties of materials. Courses may prepare students for industry certification. This course is conducted offsite. 22998

799 "Manufacturing 2 NVCC

" 2 12 Machining courses enable students to design and manufacture metal parts using various machine tools and equipment. Course content may include interpreting specifications using blueprints; preparing and using manual and computer numerical controlled (CNC) lathes and milling machines, shapers, and grinders with skill, safety, and precision; maintenance; developing part specifications; and selecting appropriate materials. Advanced course topics may include quality control; statistical process control; and application of measurements, metalworking theory, and properties of materials. Courses may prepare students for industry certification. This course is conducted offsite. 22998

696 *Culinary 1 0.5 9-12 This course focuses on practical principles including safety, sanitation, the proper use of utensils and equipment as well as the fundamentals of commercial cooking and baking. 16-052

697 **Culinary 2

Prerequisite: Culinary Arts 1" 0.5 9-12 This course emphasizes career exploration and more actual experience in the commercial aspects of food preparation and service. Students also have the opportunity to compete on the state level with other culinary students. 16-052

6697 "Culinary 3

Prerequisite: Culinary 2" 1 10-12 This course is a laboratory course which teaches the theory and develops skills in basic cooking methods and culinary techniques in the production of soups, salads, vegetables, stocks, and suaces. Meats, poultry, and seafood are prepared employing standard techniques with special attention to commercial and quality production. Tool and equipment use, weights, measures, and recipe conversion are discussed and practiced. 16-052

819 "Cat's Den

Prerequisite: Culinary 1" 1 10-12 Cat's Den is designed to allow students to participate in the setting up and operation of the Cat's Den Café, which is a student run restaurant for faculty and staff. 16098