

Who can offer the course? Each course is identified by **BITE** and/or **ME** to indicate which program can offer the course. See the last page of this document for CareerTech BMITE course certification requirements.

- Business and Information Technology (BITE)
- Marketing (ME)

Oklahoma's Promise. Oklahoma's Promise allows students whose families earn \$60,000 or less annually, and who meet academic and conduct requirements to earn a college tuition scholarship. Courses listed below that have Oklahoma's Promise computer technology credit associated with them are identified beside the course title. High school students may count a minimum of two credits but may count up to three credits for computer technology towards high school graduation and college entrance. <https://www.okhighered.org/okpromise/>

BPA/DECA. In all BMITE courses, students will develop their leadership potential through participation in DECA (an association of marketing students) or Business Professionals of America (BPA). More information about the CareerTech student organizations at <https://decaok.org> and <https://bpaok.org>.

Course Syllabi. Individual course syllabi and sequence of courses can be downloaded from the BMITE ctYou.org site. Contact the BMITE office for access information.

8206 2D Animation Techniques – 1 unit (BITE)

Students will utilize digital animation software to create finished animations, cartoons, and other short movies that utilize animated text, character movements that include walk cycles, turnarounds, voice (lip syncing), background sound, sound effects, camera movements, and include multiple scenes.

8208 3D Animation (Oklahoma's Promise) – 1 unit (BITE)

Students will utilize advanced 3D animation tools and techniques to produce professional motion graphics.

8209 3D Modeling and Rigging Techniques – 1 unit (BITE)

Students will acquire and/or enhance modeling and character rigging skills and texturing and lighting techniques to advance 3D animation skills. (This course is optional, but suggested, for the Motion Graphics Artist career major.)

8107 Accounting I – 1 unit (BITE)

This course will provide students with a strong foundation in generally accepted accounting principles and techniques needed for success in careers in accounting or other business-related fields.

8108 Accounting II – 1 unit (BITE)

This course will provide students with a strong foundation in advanced accounting principles and techniques needed for success in careers in accounting or other business-related fields.

8104 Administrative Technologies II (Oklahoma's Promise) – 1 unit (BITE)

This course builds on *Fundamentals of Administrative Technology* skills and provides students with the ability to utilize, analyze, and manipulate data through a database application. The integration of multiple applications builds critical thinking skills as students utilize the appropriate applications needed to complete case projects.

8259 Advanced Database Concepts Using Access (Oklahoma's Promise) – 1 unit (BITE)

This course builds on basic skills of relational database management systems utilizing Microsoft Access to create and maintain databases. Students will create a database; add, change and delete data; sort data; retrieve data; create forms and reports; and integrate data from other applications. These skills will help prepare students for a wide range of high demand career fields that involve analyzing data to drive business decisions.

8155 Advanced Design Techniques (Oklahoma's Promise) – 1 unit (BITE)

Students will enhance web design and animation skills as they master design techniques and methods that will empower them to become accomplished web designers as they bring ideas to life.

8156 Advanced Digital Animation (Oklahoma's Promise) – 1 unit (BITE)

Students will utilize action-scripting and advanced multimedia and web video production techniques to deliver dynamic, data-driven content to any audience, increasing the standards for layout, design, and production.

8190 Advanced Digital Video Tools and Techniques – 1 unit (BITE)

Students will be exposed to emerging technology as they utilize digital video equipment and software to enhance productions. Students will generate/package projects for a wide degree of playback compatibility.

8197 Advanced Effects for Motion Graphics – 1 unit (BITE)

Students will utilize advanced tools and techniques to produce professional video productions and/or motion graphics.

8617 Advanced Entrepreneurship – 1 unit (BITE, ME)

This course is designed to provide a detailed study of all aspects related to starting a business. The course includes the basic fundamentals of marketing and business operations and advanced topics to consider when preparing for business ownership. Through self-assessment activities, students will identify their potential for creating a business or a marketable product/idea. Students will apply what they learn by developing their own detailed business plan. Self-employment is presented as a viable career option.

8160 Advanced Programming (Oklahoma's Promise) – 1 unit (BITE)

Students will be able to demonstrate an understanding of programming languages by implementing and writing programs employing various techniques.

8258 Advanced Spreadsheet Applications (Oklahoma's Promise) – 1 unit (BITE)

This course builds on spreadsheet fundamental skills developed in *Fundamentals of Administrative Technologies* and focuses on advancing those spreadsheet skills to an expert level. This course will utilize advanced functions of spreadsheet applications to produce sophisticated reports and perform complex mathematical and statistical calculations. Students will create professional spreadsheets for use in an office environment, such as a budget, sales and revenue analysis, payroll, and debt analysis.

8612 Advertising Strategies – 1 unit (ME)

This course studies the basic functions of advertising; its role in marketing communications; economics, consumer behavior, and social influence. Students explore advertising techniques and the technology used in advertising institutions and media; campaigns and appropriations; retail and business-to-business aspects to develop and implement a promotional plan.

2535 AP Computer Science A (CSA) (Oklahoma's Promise) – 1 unit (BITE)

AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. (STEM course)

2536 AP Computer Science Principles (CSP) (Oklahoma’s Promise) – 1 unit (BITE)
AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. (STEM course)

8261 Artificial Intelligence (Oklahoma’s Promise) – 1 unit (BITE)
Students will learn foundational Machine Learning (ML) and Artificial Intelligence (AI) concepts and how to implement them using guiding principles that include ethical and legal considerations. Technologies incorporated into this course include search, machine learning, natural language processing, and robotics.

8193 Audio Production – 1 unit (BITE)
Students will become familiar with professional audio editing software that can be used to edit, mix, and produce quality sound effects for video presentations.

8203 Audio Tools & Techniques – 1 unit (BITE)
Students will learn about audio production equipment, including selection, setup, miking, recording, storage, and troubleshooting. Students will become familiar with professional audio software used in both the audio and video industries.

8234 Awareness of GPS/GIS – 1 unit (BITE, ME)
This is an introductory course using GPS (Geographical Positioning System) and GIS (Geographic Information System) It covers basic concepts of GIS and GPS and how they are used for decision making. Students work with GPS units and GIS mapping software to identify features of interest, analyze patterns, and derive useful information.

8120 Banking and Financial Services – 1 unit (BITE)
This course will provide students with the ability to recognize principles and practices of banking and credit. Students will calculate mathematical computations needed in banking and credit practices; consider technological advances and their impact on the banking industry; utilize critical thinking in researching and interacting with community financial institutions; and solve real-world business problems.

8238 Beginning Android Development – 1 unit (BITE)
This course introduces the basics of Android OS and platform, as well as some popular devices in the market. Students learn to download and install the required tools to develop Android applications and test them on the Android Emulator. Students create Apps that use Activities and Intents; analyze the components of UI and build UI for an Android device; design different types of views, create menus, and display images that enhance the end user experience; manipulate data that can be stored internally or externally; analyze use of content providers and create their own content provider. Students publish Android applications that are ready for distribution.

8194 Broadcast Production – 1 unit (BITE, ME)
Customer service, marketing, project management techniques and professionalism will be emphasized as students complete video-based projects for broadcast production. Students complete numerous projects that will be included in their portfolios as they acquire skills in advanced video editing and production.

8611 Business and Marketing Communications – ½ unit (ME)

This course applies marketing skills developed through a variety of informal and formal experiences. The performance-based course will emphasize effective interpersonal and team building skills along with written and oral communication techniques. Technology will be used to create and deliver presentations, enhance problem-solving situations, and practice critical thinking and decision-making. Job interview, research paper, and/or projects will culminate this course.

8118 Business and Personal Finance – 1 unit (BITE)

This course will provide students with the skills to manage personal finances, identify the characteristics of effective business financial goals, and examine the organization and activities of commercial banks and other financial institutions. Students will examine case studies and complete teamwork projects which require critical thinking for the financial aspect of business in banks, other financial institutions, business insurance, and the operations of technology and financial management in the global setting.

8177 Business Communications – 1 unit (BITE)

This course delivers knowledge of communicating in the workplace. Students learn the skills necessary to communicate effectively with coworkers at all levels and with external business contacts.

8254 Business Foundations – ½ or 1 unit (BITE)

The purpose of this course is to assist middle school students (grades 6-8) in making informed decisions regarding future academic and occupational goals and to provide information and foundational training regarding careers in these career clusters: Business Management and Administration; Finance; Hospitality and Tourism; Information Technology; and Marketing. Through project-based instruction students are introduced to the principles of business and computer technology for these clusters while reinforcing keyboarding skills.

8102 Business Information Technology Internship – 1 unit (BITE)

This course provides students with the opportunity for a business/information technology internship that aligns with their BMITE program of study. Students must have completed a minimum of 120 clock hours (1 unit of credit) of *CareerTech* business/information technology curriculum in order to be eligible for an internship (can be taken in conjunction with the internship course). Students must maintain employment at an approved worksite that is in direct relation to the business/information technology courses the student has taken or is currently enrolled in.

8606 Business Management and Supervision – 1 unit (ME)

This course studies the planning, organizing, directing, and controlling the use of an organization's resources to effectively and economically attain its objectives. Students learn the art and science of management and supervision in problem-solving, decision making, and working with other people to accomplish common goals.

8625 Buying and Merchandising – ½ unit (ME)

This is an introductory course designed to explore the role and responsibility of a buyer and merchandiser. It covers the job skills necessary to prepare for the role of a buyer or merchandiser including the ability to use mathematic formulas, budgeting, research, making purchases, and additional responsibilities of the buyer.

8166 C# Programming (Oklahoma's Promise) – 1 unit (BITE)

Students will use C# to create event-driven programs, and expand their knowledge of C# as used in business applications both for Windows and for the Web.

8165 C++ Programming (Oklahoma's Promise) – 1 unit (BITE)

Students will use C++ to write object-oriented programs, and develop advanced C++ applications using user interface components.

8106 Capstone – 1 unit (BITE, ME)

Internships, project-based instruction and additional industry certifications will be utilized to reinforce skills obtained within any Business, Marketing, and Information Technology Education (BMITE) state program area. Students will make final preparations for industry certifications as they master competencies; select from various project options to finalize portfolios that highlight skills and certifications; and may undertake special projects, cross-train or participate in work-based experiences to enhance skills in accordance with industry demands.

8136 Computer Repair and Troubleshooting I (Oklahoma's Promise) – 1 unit (BITE)

In this course, students will prepare for positions related to the maintenance of computers and computer-related equipment through hands-on and project-based learning, textbook assignments, and Internet research. The focus of this course is the hardware area.

8137 Computer Repair and Troubleshooting II (Oklahoma's Promise) – 1 unit (BITE)

In this course, students will prepare for positions related to the maintenance of computers and computer-related equipment through hands-on and project-based learning, textbook assignments, and Internet research. The focus of this course is software and operating systems.

8138 Computer Repair and Troubleshooting III – 1 unit (BITE)

Students will demonstrate knowledge and problem-solving skills in the area of computer installation, evaluations, troubleshooting and upgrades of computer hardware. This would include, but not be limited to, storage and drives, system boards, processors, memory, peripherals, and networks. Emphasis will be placed on hardware devices and network systems as well as communication devices.

8867 Computer Science Discoveries (Oklahoma's Promise) – 1 unit (BITE)

Computer Science Discoveries takes a wide lens on computer science by covering topics such as programming, physical computing, HTML/CSS, and data. The course inspires students as they build their own websites, apps, games, and physical computing devices. (STEM course)

8852 Computer Science Essentials (Oklahoma's Promise) – 1 unit (BITE)

This course will enable students to develop computational thinking skills that prepares them to advance to Computer Science Principles and Computer Science A. (STEM course)

8860 Computer Science Principles (Oklahoma's Promise) – 1 unit (BITE)

This course introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. More than a traditional introduction to programming, it is a rigorous, engaging, and approachable course that explores many of the foundational ideas of computing so all students understand how these concepts are transforming the world we live in. (STEM course)

8109 Computerized Accounting (Oklahoma's Promise) – 1 unit (BITE)

This course is designed to integrate accounting principles using computerized accounting system(s).

8224 Cross Platform Game Programming – 1 unit (BITE)

Students will be introduced to the concepts and methods for the design and development of computer games. Topics include: animation, 3D Animation, 3D Motion, software engineering, game design, movement and controls, user interfaces, artificial intelligence, game SDK's, networking, level editors, model editor, shader collections, game engine, and commercialization of software.

- 8229 Customer Assistance – 1 unit** (BITE, ME)
This course provides students with customer service concepts, including assessing customer needs, educating customers, solving problems, and making decisions. Students learn competencies required to pass industry certifications in addition to securing and holding jobs.
- 8605 Customer Service – ½ unit** (ME)
This is a course of study in basic customer service concepts with an emphasis on exploring elements of the service industry, assessing customer needs, educating customers, selling processes, solving problems, making decisions, leading others, working in teams, applying technology, organizing and planning, building consensus, and setting goals. Students learn competencies required to pass industry certifications and secure and hold jobs.
- 8256 Cybersecurity Basics (Oklahoma’s Promise) – 1 unit** (BITE)
Students will learn defensive and hardening techniques used in a Windows, Cisco, and Linux environment, along with the ethical behaviors needed to be successful in industry.
- 8142 Database Administration (Oklahoma’s Promise) – 1 unit** (BITE)
This course will provide instruction for students to perform database administration duties.
- 8154 Design Tools and Electronic Marketing Strategies (Oklahoma’s Promise) – 1 unit** (BITE, ME)
In this course, students will become proficient in the use of premier, leading edge tools designed to create graphically rich and intuitive websites, productions, and/or publications. The primary focus of this course includes color and design theories, accessibility, and marketing strategies resulting in a digital portfolio.
- 8145 Desktop Publishing Fundamentals – 1 unit** (BITE)
Students will learn basic design processes, key design elements and graphic design skills. This course can be offered in grades 6-9.
- 8149 Desktop Publishing and Graphic Design (Oklahoma’s Promise) – 1 unit** (BITE)
In this course, students will acquire skills related to communicating through visual design with the primary emphasis of this course being desktop publishing and working with graphics.
- 8151 Digital Editing and Production Photography – (Oklahoma’s Promise) 1 unit** (BITE)
In this course, students will acquire skills in digital photography. Additionally, students will understand certification standards and copyright basics.
- 8191 Digital Media Production (Oklahoma’s Promise) – 1 unit** (BITE)
In this course, students will prepare for careers in digital communication as they learn to develop personal and professional videos applying appropriate certification and copyright standards.
- 8628 Digital Marketing – 1 unit** (BITE, ME)
This course focuses on the ways in which traditional marketing strategies can be applied to the digital world. Students will explore high-level approaches to marketing strategies utilizing mobile technology, social media, and search engine optimization (SEO).
- 8260 Drone Technology (Oklahoma’s Promise)– 1 unit** (BITE, ME)
Students will learn essential theory and design concepts of small, unmanned aircraft systems. These technologies include airframes, electric motors, propellers and other basic knowledge required for successfully piloting a drone craft.

8619 E-Commerce Marketing – 1 unit**(ME)**

This course focuses on the development of communication and marketing strategies for effective electronic commerce to take place. It will include market products/services, use of the Internet, identify markets, and communicate with them. The course provides an overview of the marketing activities businesses need to perform in order to maximize return and meet customer expectations with electronic purchases.

8623 Employment Essentials – ½ unit**(BITE, ME)**

This course is designed to provide students with fundamental workplace knowledge and skills to succeed in any career. Students develop soft skills, personality traits, personal management, and basic technology skills desired by employers. They explore techniques to manage their personal life, financial life, and career preparation.

8616 Entrepreneurship – 1 unit**(ME)**

This course will provide students with fundamental concepts, principles and ideas needed to understand the basics of entrepreneurship in business management. Skills demonstrated are as follows: develop a Business Plan, Identify Marketing Needs, Insurance Concepts pertaining to a business, how to market a business, maintain records and accounting processes, manage finances, integrate technology into the business functions, apply legal, ethical and social obligations, and analyze the growth of today's marketplace.

8620 Entrepreneurship Awareness – 1 unit**(ME)**

This course introduces students to the concept of entrepreneurship. Students acquire knowledge of the nature and scope of entrepreneurship. Students will explore the relationship between entrepreneurship, business and marketing skills, creative instincts, self-esteem/discipline and independence. Career opportunities and pre-employment skills required for success in business, marketing, and management will be introduced.

8629 Ethical Leadership – ½ unit**(BITE, ME)**

This course is a principles-based ethics course introducing students to key leadership and ethical knowledge and skills, including integrity, trust, accountability, transparency, fairness, respect, rule of law, and viability. Students apply ethical principles to contemporary, real-world situations that teens and young adults often encounter in school, at home, with friends, and entry-level job positions. They examine the concept of ethical leadership and strengthen their leadership and ethical decision-making skills through the planning, implementation, and evaluation of a class service-learning project.

8207 Fundamentals of 3D Motion Graphics (Oklahoma's Promise) – 1 unit**(BITE)**

In this course, students will become familiar with 3D motion graphics as they create, animate, revise, optimize and export 3D graphics and animations.

8103 Fundamentals of Administrative Technologies (Oklahoma's Promise) – 1 unit**(BITE)**

This course builds on core business skills and will provide students with the concepts, principles, and attitudes needed to understand how an office is operated and managed in a rapidly changing global environment. State-of-the-art personal computing is integrated throughout the course.

8139 Fundamentals of Database Development (Oklahoma's Promise) – 1 unit**(BITE)**

In this course, students will develop an understanding of data modeling concepts as they create relational databases and use SQL to manipulate data.

8169 Fundamentals of Technology (Oklahoma's Promise) – 1 unit**(BITE)**

This course provides students with fundamental concepts, principles, and ideas needed to understand how business is operated and managed in a rapidly changing technical environment. It provides job readiness and soft skills critical for success in any workplace setting.

8228 Fundamentals of Video Game Design (Oklahoma's Promise) – 1 unit (BITE)

Students will be introduced to the concepts and methods for the design and development of computer games. Topics include: history of games, 2D graphics and animation, sprites, 3D animation, binary space partition trees, software engineering, game design, interactive fiction, user interfaces, artificial intelligence, game SDK's, networking, multi-player games, game development environments, and commercialization of software.

8153 Fundamentals of Web Design (Oklahoma's Promise) – 1 unit (BITE)

Students will acquire fundamental web authoring skills and design strategies through the application of XHTML incorporating Cascading Style Sheets and future trends in web programming/scripting. Once XHTML foundation skills are achieved, students will utilize a WYSIWYG editor and/or a graphics application package to produce standards based web sites.

8245 Gaming Development Fundamentals (Oklahoma's Promise) – 1 unit (BITE)

This course helps develop core gaming development skills that includes a solid foundational knowledge of game design, hardware, graphics, and animation. It is recommended that students be familiar with general game development concepts and have some hands-on experience with these technologies either by taking relevant training courses or working with tutorials and samples available through sources such as MSDN and Microsoft Visual Studio.

8627 Global Markets and Trade – 1 unit (ME)

This course is designed to help students explore the demand for goods and service exports. Key topics will include e-commerce, export financing, export marketing, strategic alliances, and foreign investments. Students will determine the decision-making skills needed to interact with foreign markets.

8873 Google Tools (Oklahoma's Promise) – 1 unit (BITE)

This course will teach students how to effectively use Google products and services. Students will create a Google account and learn of its many benefits. They will practice navigating the general interface of Google products. Searching, organizational, communication, and collaboration components of Google products will be highlighted to help students develop a deeper understanding of how Google can enhance learning. (STEM course)

8213 Interactive Marketing Techniques – 1 unit (BITE, ME)

Students will research marketing strategies and utilize appropriate design principles as they develop a brand identity for a business. Productivity tools will be utilized to create assets and build customer relations through electronic marketing techniques.

8239 Intermediate Android Development – 1 unit (BITE)

This course covers the concepts of Android use and its development. Students download and install the tools necessary for developing Android applications. Students create application manifests, applications that use external resources to provide dynamic support for locations, languages, and hardware configurations. Students enhance views and layouts, create Activities and Broadcast events, connect to internet resources, and save and manage preferences for the end user. Students build databases and expand usability with Content providers, create services that run independently, and build menus and navigation that enhance the user's experience. Students design Apps that use the Text-to-Speech and speech recognition libraries and use animations. Students program the device for sensory input and screen orientations. Students design for interactive Maps, build Widgets, add audio and video capabilities as well as SMS messaging, and Android Beaming. Students also learn how to sign an application for distribution, publish the application, as well as promote and monetize it.

8618 International Business and Marketing – 1 unit (ME)

This course of study includes the basic fundamentals of marketing and business operations with emphasis on the economic advantages and disadvantages of international trade, importance of understanding cultures and customs, interdependence of nations, and trade balances. Students will gain an understanding of opportunities available in international business and required skills to succeed.

8614 Introduction to Business/Marketing – ½ unit (ME)

This is an introductory course designed to explore the business and marketing system and its role in our free enterprise economic system. Students will gain an understanding of the marketing concept and its relations to production of goods and services. Students will study the responsibilities and role of an individual in today's business and economic environment as a consumer and a producer of goods and services. Career opportunities within business and marketing fields will also be introduced to students.

8179 Introduction to Entrepreneurship – 1 unit (BITE)

This course helps students discover what an entrepreneurial career entails. Students will look at the relationship between entrepreneurship and business skills and learn about career opportunities and skills needed to become an entrepreneur.

8225 Introduction to Programming (Oklahoma's Promise) – 1 unit (BITE)

Students will demonstrate an understanding of programming languages by implementing and writing programs employing various techniques. This course may utilize Basic or Liberty Basic programming language.

8255 Internet of Things (IoT) Fundamentals (Oklahoma's Promise) – 1 unit (BITE)

Cisco Networking Academy's IoT Fundamentals curriculum provides a comprehensive understanding of the Internet of Things (IoT). It develops foundational skills using hands-on lab activities that stimulate students in applying creative problem-solving and rapid prototyping in the interdisciplinary domain of electronics, security, networking, data analytics, and business. The student-centric approach translates into being able to ideate, design, prototype and present an IoT solution for an identified business or society need. Students explore three basics IoT insights: Why do we want to connect everything? What do we want to connect? How do we connect?

8252 IT Essentials (Oklahoma's Promise) – 1 unit (BITE)

This course provides an introduction to the technical skills needed to help meet the growing demand for entry-level ICT professionals. It covers the fundamentals of computer hardware and software, as well as advanced concepts such as security, networking, and the responsibilities of an ICT professional. Students demonstrate, in a laboratory setting, building a computer, installing the operating systems, adding peripherals and connecting the computer to a local-area network and the internet.

8230 JAVA Programming (Oklahoma's Promise) – 1 unit (BITE)

This course is designed to provide students with learning experiences to employ the concepts of object oriented programming to develop applications in the Java programming language. Concepts such as advanced program development tools, console/graphic user interfaces, and event/ exception handling are introduced.

8216 Layout Design Techniques – 1 unit (BITE)

Students will be immersed in the basic elements of design and composition including typography, color, and information design. Students also focus on enhancing their creativity by producing graphical assets that incorporate design principles.

8615 Marketing Economics – ½ unit (ME)

This is a course of study in the basic economic concepts and foundations with an emphasis on the application of technology to perform marketing duties and tasks, which includes the use of word processing, databases, spreadsheets, and graphics. Course content includes topics related to economics, finance, competition, pricing, distribution channels, and international trade.

8602 Marketing Fundamentals – 1 unit (ME)

Marketing Fundamentals develops student understanding and skills in such areas as economics, financial analysis, human resources management, information management, marketing, operations, professional development, strategic management, channel management, marketing-information management, market planning, pricing, product/service management, promotion, and selling.

8622 Marketing Internship – 1 unit (ME)

This course provides students with the opportunity for a marketing internship that aligns with their BMITE program of study. Students must have completed a minimum of 120 clock hours (1 unit of credit) of *CareerTech* Marketing curriculum in order to be eligible for an internship (or could be taken in conjunction with the internship course). Students must maintain employment at an approved worksite that is in direct relation to the marketing courses the student has taken or is currently enrolled in.

8613 Marketing Research – 1 unit (ME)

This is a specialized technology course with instruction in the following key topics: marketing research defined, importance of marketing research, use of marketing research, characteristics of marketing research, users of marketing research, ways marketing research is performed and steps in marketing research. Advanced study would include the design of a marketing research study, conduct market research, analyze the results of a research study, and prepare a promotion campaign based on research, presentation of the findings and the proposed promotion campaign.

8180 Math of Finance – 1 unit (BITE)

This course provides knowledge of skill in mechanical computations of mathematics that apply to many aspects of business. Principles of mathematics are applied to real business examples to build student understanding of how to determine strategies and procedures for solving business situations.

8143 Modeling Languages – 1 unit (BITE)

In this course designed for IT professionals, students will acquire fundamentals of a variety of Modeling Languages and apply them using graphic modeling software.

8150 Multimedia & Image Management Techniques (Oklahoma's Promise) – 1 unit (BITE)

Students will acquire fundamental skills in image creation and management procedures and techniques as they create, revise, optimize, and export graphics for video, print, and web publishing.

8223 Network Security Awareness (Oklahoma's Promise) – 1 unit (BITE)

Students will demonstrate knowledge and competency in PC, Server, and Internet Security. Students will utilize these skills in preparation for positions related to the maintenance of computers and computer-related equipment through hands-on and project-based learning, textbook assignments, and Internet research. The focus of this course is in the hardware area.

8192 Non-Linear Digital Editing – 1 unit (BITE)

In this course, students will master real-time editing for professional digital video productions.

8189 Non-Linear Digital Production – 1 unit (BITE)

In this course, students will foster creativity and innovation while designing motion graphics and visual effects that deliver the desired results.

8105 Office Administration & Management (Oklahoma’s Promise) – 1 unit (BITE)

This course builds on the Fundamentals of Administrative Technologies. It focuses on higher-level content and strategies necessary to effectively engage students in technology and managerial skills needed for success in competitive business careers. This course is designed to enhance administrative support and management skills needed in the workplace.

8178 Personal Finance – ½ or 1 unit (BITE)

This course is designed to provide the knowledge and skills necessary to make wise decisions for financial planning. Students will analyze choices and develop tools to assist them in wise money management. The standards set forth in the Passport to Financial Literacy Act of 2007 (70 O.S. 11-103.6h) will be taught in conjunction with the competencies listed. Personal Finance can be offered as a one- or two-semester course.

8861 PLTW Cybersecurity – 1 unit (BITE)

Whether seeking a career in the growing field of cybersecurity or learning to defend their own personal data or a company’s data, students in Cybersecurity establish an ethical code of conduct while learning to defend data in today’s complex cyberworld

8220 Principles of Animation – 1 unit (BITE)

In this course students will utilize animation and storyboarding techniques to plan the production of an animation project. Students will learn to design production steps from script and storyboard actions in the pre-production planning process.

8624 Product and Service Sales – ½ unit (ME)

This course of study includes the fundamentals of retail marketing/sales with an emphasis on the following competencies: industry knowledge, selling techniques, customer services, merchandising, visual merchandising, marketing math, technology and systems used in sales, advertising and promotion, management of employees, loss prevention, forecasting sales, and leadership development. Students will develop leadership traits and identify their leadership potential through participation in DECA (and association of marketing students) student organization.

8608 Professional Sales – 1 unit (ME)

This course focuses on the purpose of the promotional strategy of selling and its role in the marketing environment. Emphasis is placed on the purpose and steps of the sales process, and the importance of completing each step in the presentation. Technology will be used to create and deliver presentations, enhance problem-solving situations, and practice critical thinking and decision-making. Professional careers in sales will be explored.

8222 Programming Fundamentals (Oklahoma’s Promise) – 1 unit (BITE)

This course introduces fundamental concepts and terminology of software application development and develops skills in designing and writing simple computer programs. This includes fundamental concepts of software programming, including the use of pseudo code, flowcharts, statement sequencing, conditional statements, loop structures, procedural versus object oriented programming structures and input/output.

8621 Public Relations Marketing – 1 unit (ME)
This course is designed to teach distinctive marketing management functions that help establish and maintain the lines of communications that promote concepts of marketing and business success. Students explore marketing tools used for relaying information to consumers, organizations, and the media.

8871 Python (Oklahoma's Promise) – 1 unit (BITE)
Python is a general-purpose programming language used to build just about anything. Python is key for backend web development, data analysis, artificial intelligence and scientific computing, all of which are key for pursuing STEM careers. (STEM course)

8196 Remote/Field Production (IT) – 1 unit (BITE)
This course introduces the students to all aspects of the remote or field production environment, pre-/live-/post-production, gaining hands-on experience in various remote or field production roles.

8125 Routing and Switching I (Oklahoma's Promise) – 1 unit (BITE)
This course is an introduction to networking that introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. Students are introduced to the architecture, structure, functions, components, and models of the Internet and computer networks.

8126 Routing and Switching II (Oklahoma's Promise) – 1 unit (BITE)
Routing and Switching Essentials -- describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single - area and multi -area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

8607 Sales and Sales Promotion – ½ unit (ME)
This is a course of study designed to prepare students with the basic knowledge and skills necessary for a career in sales. Students will discover the role of sales and sales promotion in meeting the goals of an organization. Topics include; understanding personal traits, human relation skills, product knowledge, selling principles and techniques, promotion, advertising, and state and federal laws.

8246 Security Fundamentals (Oklahoma's Promise) – 1 unit (BITE)
Candidates for this course are seeking to prove fundamental security knowledge and skills. Candidates should have a solid foundational knowledge of the topics outlined in this preparation guide. It is recommended that candidates become familiar with the concepts and the technologies described here by taking relevant training courses. Candidates are expected to have some hands-on experience with Windows Server, Windows based networking, Active Directory, Anti-Malware products, firewalls, network topologies and devices, and network ports.

8159 Scripting Language Fundamentals (Oklahoma's Promise)-1 unit (BITE)
Students will develop an understanding of IT concepts and techniques and develop an understanding of basic programming concepts as they relate to software programming and writing simple computer programs. (Can be substituted for Advanced Programming)

8610 Sports and Entertainment Marketing – 1 unit**(ME)**

This is a specialized course designed for students with a career interest in the sports and entertainment industry. Instructional areas will include: orientation to the sports and entertainment industry, economics, decision-making, event marketing, sales and sales promotions, event executions, legal aspects/contracts, and career opportunities. Classroom instruction will be reinforced through the use of outside lectures, case studies, field trip experiences, job shadowing, current periodicals, computers and software, in-house projects, and constructive/discovery learning. Students will develop leadership traits and identify their leadership potential through participation in the DECA (an association of marketing students) student organization.

8195 Studio Production (IT) – 1 unit**(BITE)**

This course introduces all aspects of the studio production environment, from content creation to distribution.

8167 Visual Basic .NET Programming (Oklahoma’s Promise) – 1 unit**(BITE)**

Students will create event-driven programs using Visual Basic and expand their knowledge in its use in business applications for a Windows environment and for the Web.

8218 Web Application Development (Oklahoma’s Promise) - 1 Unit**(BITE)**

In this course Students will develop a Web Application that is database driven. In order to develop the application students will utilize the project cycle for web development. (This course can substitute with Server-Side Scripting).

8212 Web Application Technologies – 1 Unit**(BITE)**

Students will learn the syntax, the basics of using regular expressions, and how to access and manipulate files using server-side scripting languages. Instruction will include topics such as functions, methods and events including how to define and call functions. This course will teach students how to use conditional statements to control program flow. Students will also implement best practices while coding an application and utilize appropriate debugging techniques. (This course can substitute for Web Scripting Foundations).

8210 Web Authoring Languages – 1 Unit**(BITE)**

This course introduces students to (X)HTML, emphasizing semantic use of elements and the benefits of using standards-based, valid code. The use of CSS is discussed to separate content from presentation in order to decrease maintenance time, speed up development, improve download speed, and design capabilities. Students will employ web standards concepts to create a website that uses global style sheets. (This course can be substituted with Fundamentals of Web Design).

8211 Web Authoring Tools – 1 Unit**(BITE)**

Students will acquire fundamental web authoring skills and design strategies through the utilization of a WYSIWYG editor and digital media tools.

8243 Web Development Fundamentals – 1 unit**(BITE)**

Candidates should have a solid foundational knowledge of the topics outlines in this preparation guide. It is recommended that candidates be familiar with the concepts of and have hands on experience with the technologies describes here by either by taking relevant training courses or by working with tutorials and samples available on MSDN and in Microsoft Visual Studio. Candidates are expected to have some experience with a Microsoft .NET language such as C# or Microsoft Visual Basic. NET.

OCAS Subject Codes for FY2025

8100 BUSINESS AND INFORMATION TECHNOLOGY

8102 Business Information Technology Internship	
8103 Fundamentals of Administrative Technologies	(Oklahoma's Promise)
8104 Administrative Technologies II	(Oklahoma's Promise)
8105 Office Administration & Management	(Oklahoma's Promise)
8106 Career Major Capstone	
8107 Accounting I	
8108 Accounting II	
8109 Computerized Accounting	(Oklahoma's Promise)
8118 Business & Personal Finance	
8120 Banking & Financial Services	
8125 Routing and Switching I	(Oklahoma's Promise)
8126 Routing and Switching II	(Oklahoma's Promise)
8136 Computer Repair and Troubleshooting I	(Oklahoma's Promise)
8137 Computer Repair and Troubleshooting II	(Oklahoma's Promise)
8138 Computer Repair and Troubleshooting III	
8139 Fundamentals of Database Development	(Oklahoma's Promise)
8142 Database Administration	(Oklahoma's Promise)
8143 Modeling Languages	
8145 Desktop Publishing Fundamentals	
8149 Desktop Publishing and Graphic Design	(Oklahoma's Promise)
8150 Multimedia & Image Management Techniques	(Oklahoma's Promise)
8151 Digital Editing and Production Photography	(Oklahoma's Promise)
8153 Fundamentals of Web Design	(Oklahoma's Promise)
8154 Design Tools and Electronic Marketing Strategies	(Oklahoma's Promise)
8155 Advanced Design Techniques	(Oklahoma's Promise)
8156 Advanced Digital Animation	(Oklahoma's Promise)
8160 Advanced Programming	(Oklahoma's Promise)
8165 C++ Programming	(Oklahoma's Promise)
8166 C# Programming	(Oklahoma's Promise)
8167 Visual Basic .NET Programming	(Oklahoma's Promise)
8169 Fundamentals of Technology	(Oklahoma's Promise)
8177 Business Communications	
8178 Personal Finance	
8179 Intro to Entrepreneurship	
8180 Math of Finance	
8189 Non-Linear Digital Production	
8190 Advanced Digital Video Tools and Techniques	
8191 Digital Media Production	(Oklahoma's Promise)
8192 Non-Linear Digital Editing	
8193 Audio Production	
8194 Broadcast Production	
8195 Studio Production (IT)	
8196 Remote/Field Production (IT)	
8197 Advanced Effects for Motion Graphics	

8203 Audio Tools and Techniques	
8206 2D Animation Techniques	
8207 Fundamentals of 3D Motion Graphics	(Oklahoma's Promise)
8208 3D Animation	(Oklahoma's Promise)
8209 3D Modeling and Rigging Techniques	
8210 Web Authoring Languages	
8211 Web Authoring Tools	
8212 Web Application Technologies	
8213 Interactive Marketing Techniques	
8216 Layout Design Techniques	
8218 Web Application Development	(Oklahoma's Promise)
8220 Principles of Animation	
8222 Programming Fundamentals	(Oklahoma's Promise)
8223 Network Security Awareness	(Oklahoma's Promise)
8224 Cross Platform Game Programming	
8225 Introduction to Programming	(Oklahoma's Promise)
8228 Fundamentals of Video Game Design	(Oklahoma's Promise)
8229 Customer Assistance	
8230 JAVA Programming	(Oklahoma's Promise)
8234 Awareness of GPS/GIS	
8238 Beginning Android Development	
8239 Intermediate Android Development	
8243 Web Development Fundamentals	
8245 Gaming Development Fundamentals	(Oklahoma's Promise)
8246 Security Fundamentals	(Oklahoma's Promise)
8252 IT Essentials	(Oklahoma's Promise)
8254 Business Foundations	
8255 Internet of Things (IoT) Fundamentals: Connecting Things	(Oklahoma's Promise)
8256 Cybersecurity Basics	(Oklahoma's Promise)
8258 Advanced Spreadsheet Applications	(Oklahoma's Promise)
8259 Advanced Database Concepts Using Access	(Oklahoma's Promise)
8260 Drone Technology	(Oklahoma's Promise)
8261 Artificial Intelligence	(Oklahoma's Promise)

Note: The following STEM courses have been approved for BITE certified teachers.

8800 STEM EDUCATION

2536 AP Computer Science Principles (CSP)	(Oklahoma's Promise)
8852 Computer Science Essentials	(Oklahoma's Promise)
2535 AP Computer Science A (CSA)	(Oklahoma's Promise)
8860 Computer Science Principles	(Oklahoma's Promise)
8861 Cybersecurity	(Oklahoma's Promise)
8867 Computer Science Discoveries	(Oklahoma's Promise)
8871 Python	(Oklahoma's Promise)
8873 Google Tools	(Oklahoma's Promise)

OCAS Subject Codes for FY2025

8600 MARKETING EDUCATION

8602 Marketing Fundamentals
8605 Customer Service
8606 Business Management and Supervision
8607 Sales and Sales Promotion
8608 Professional Sales
8610 Sports and Entertainment Marketing
8611 Business and Marketing Communications
8612 Advertising Strategies
8613 Marketing Research
8614 Intro to Business/Marketing
8615 Marketing Economics
8616 Entrepreneurship
8617 Advanced Entrepreneurship
8618 International Business and Marketing
8619 E-Commerce Marketing
8620 Entrepreneurship Awareness
8621 Public Relations Marketing
8622 Marketing Internship
8623 Employment Essentials
8624 Product & Service Sales
8625 Buying and Merchandising
8627 Global Markets and Trade
8628 Digital Marketing
8629 Ethical Leadership

Middle School OCAS Subject Codes for FY2025 Grades 6 – 8

8145 Desktop Publishing Fundamentals (6-9)
8169 Fundamentals of Technology (8-12)
8254 Business Foundations (6-8)
8629 Ethical Leadership (6-12)
8867 Computer Science Discoveries (8-12)

CTE BMITE Teacher Certification

Teacher Certification. The teacher certification requirement for each course has been identified with the Oklahoma State Department of Education.

- Business and Information Technology (BITE) – **7513 or 7514 CareerTech Business Education.**
- Marketing (ME) – **7501 CareerTech Marketing Education.**
- **CareerTech Course Certification Requirements –**
<https://oklahoma.gov/careertech/educators/certifications/forms-and-resources.html>