

HOSPITALITY, TOURISM, AND RECREATION SECTOR (HOS)

The Hospitality, Tourism, and Recreation sector provides students with the academic and technical preparation necessary to pursue high-skill, high-demand careers in these related and growing industries. The sector encompasses three distinct, yet interrelated, career pathways: Food Science, Dietetics, and Nutrition; Food Service and Hospitality; and Hospitality, Tourism, and Recreation. The standards are designed to integrate academic and career technical concepts. The anchor standards include Consumer and Family Studies comprehensive technical knowledge and skills that prepare students for learning in the pathways. The knowledge and skills are acquired within a sequential, standards-based pathway program that integrates hands-on projects, work-based instruction, and leadership development such as that offered through Family, Career and Community Leaders of America (FCCLA). Standards in this sector are designed to prepare students for technical training, postsecondary education, and entry to a career.

Multiple Pathways (Pathway 999)

8000 Introduction to Hospitality, Tourism, and Recreation

This introductory course in the Hospitality, Tourism, and Recreation sector is the first in a sequence of courses that provides instruction in the eight content areas of Family and Consumer Sciences. The focus is on preparing students for personal and life management, and providing a strong foundation for Family and Consumer Sciences education related career paths. Instruction in the content areas of child development and guidance; consumer education; family and human development; education; fashion, textiles, and apparel; food and nutrition; housing and furnishings; individual and family health; and leadership is designed to prepare students with the knowledge, skills, and attitudes to function effectively as family members, leaders, workers, and citizens.

Food Science, Dietetics, and Nutrition (Pathway 200)

8010 Intermediate Food Science, Dietetics, and Nutrition (Concentrator)

This concentration course includes instruction in researching information to evaluate an individual's diet, and adequacy of essential nutrients supplied in the diet; physiology and utilization of nutrients by the body; contribution of nutrients to general health; dietary needs during the life cycle; food regulations by government agencies; impact of additives, environmental contaminants, food-borne illnesses, food faddism and quackery; cultural factors in food choices; new food technology; and the chemical and biological relation of food. This course provides a strong background for nutritional science, dietetics, as well as careers related to the food industry.

8011 Advanced Food Science, Dietetics, and Nutrition (Capstone)

This capstone course prepares students for employment in occupations in the food science and technology, dietetics, and nutrition industries. Instruction includes meeting nutritional and dietary needs; planning, selecting, purchasing and preparing of food to conserve nutrients; operational procedures; food safety and sanitation; using dietary and food guidelines to plan healthy diets; food preferences; data and statistics; and marketing. Students develop skills to utilize nutritional knowledge in preparing, inspecting, and serving meals to people with special counseling under the direction of a dietetic technician or professional dietitian; identifying qualities of various foods; collecting and testing food samples as directed; recording and comparing test results; purchasing and maintaining laboratory supplies and inventory.

CDE Course Codes Realignment
2021-22

Food Service and Hospitality (Pathway 201)

8020 Intermediate Food Service and Hospitality (Concentrator)

This concentration course prepares students to understand the scientific principles of nutrition, the relationship of nutrition to health and well-being, and also prepares students with food production, preparation, and service skills. Instruction includes topics such as finding nutritive food values; planning, selecting, storing, purchasing, preparing, testing, serving and selling of quality food and food products; nutrition and health; safety and emergencies; food safety and sanitation; meal management; food preparation; food purchasing; food in culture; the science of food and nutrition; food costs and production; and food technology. This course provides a solid background for a wide range of careers such as food service and hospitality, food science, dietetics, and nutrition.

8021 Advanced Food Service and Hospitality (Capstone)

This capstone course prepares students with food production, preparation, and service skills for employment institutional, commercial, or independently owned food establishments or other food and hospitality industry occupations. Instruction includes topics such as planning, selecting, storing, purchasing, preparing, testing, serving and selling of quality food and food products; nutritive values; safety and sanitation; use and care of commercial equipment; management of food establishments; cost and profitability analysis; side work and customer orders; and handling cash and credit transactions.

Hospitality, Tourism, and Recreation (Pathway 202)

8030 Intermediate Hospitality, Tourism and Recreation (Concentrator)

This concentration course prepares students for employment in occupations in hospitality, tourism, and recreation. Instruction includes providing hospitality services in diverse settings to meet the needs of a wide variety of clients; eco-tourism; guest services; geography of the continents; customs and culture of countries as tourist destinations; special documentation needed for international travel; planning events to client specifications; recreational opportunities related to on-site and off-site attractions; and environmental and ecological principles.

8031 Advanced Hospitality, Tourism and Recreation (Capstone)

This capstone course prepares students with the skills, attitudes, and knowledge needed for employment in the lodging industry, travel-related service occupations, and/or theme parks, attractions, outdoor recreation, and exhibitions and event-planning. Topics covered include lodging terminology; the history of lodging; marketing; property management; guest psychology and relationships; lodging operations; food and beverage services; convention services; business management; industry awareness and policies; security and emergency procedures; salesmanship and guest satisfaction; computer applications; geography; culture and customs; reservations and ticketing; travel itineraries; international travel; and technology used in the industry. Additional instruction could include trade shows, fairs, and conferences; outdoor recreation and management; financial transactions; tourism; client information and planning specialized events to include themes, timelines, budgets, target audiences, objectives, agendas and public relations related to support services within the lodging industry. This program provides a strong background for careers in Hospitality, Tourism, and Recreation, as well as Lodging and Hotel Operations, and/or Theme Parks, Attractions, and Events.

INFORMATION AND COMMUNICATION TECHNOLOGIES SECTOR (INF)

Information and Communication Technologies (ICT) have expanded the need for employees who can understand, manage, and support all rapidly emerging, evolving, and converging computer, software, networking, telecommunications, Internet, programming, and information systems. Essential skills for careers in the ICT sector include understanding systems that support the management and flow of data, the ability to work well and communicate clearly with people, and the ability to manage projects efficiently. The ICT sector meets national criteria for high demand, high wages, and high skills and provides students with excellent opportunities for interesting work and good pay. More than 70 percent of jobs in this sector will require a bachelor's degree or higher by 2018.

Multiple Pathways (Pathway 999)

8100 Introduction to Information and Communication Technologies
This course provides students with foundational knowledge of programming and computer science. Students will explore topics of human computer interaction, problem solving, web design, computer programming, data modeling, and robotics. Throughout the course, students will understand the algorithmic underpinnings of computer applications and gain technical expertise using computational tools. Other areas of the sector could be introduced such as software design, networking, game design, information support, and topics like artificial intelligence, and robotics. Social issues in ICT will be introduced such as hacking and cybersecurity, social media usage and protecting personal information, the digital divide, open government data, and ethical computing. Course titles may also include: Exploring Computer Science, Introduction to Computer Science A; Computer Principles; Introduction to Information and Communication Technologies; Introduction to Computer Technologies.

Information Support and Services (Pathway 170)

8110 Introduction to Information Support Services
This course will introduce students to computer usage and functionality, operating systems, the main system components, network connectivity, software installation, data backup, troubleshooting, and system administration. The role of ICT in organizations and business processes using tools such as organizational charts, flowcharts, and timelines will be discussed. Client relations and communications will be introduced along with information gathering techniques, and critical thinking and listening as part of problem solving.

8111 Intermediate Information Support Services (Concentrator)
This course is project-based and designed to provide students with hands-on use of software applications while studying computer concepts such as accessing and transmitting information in a networked environment. Students will learn the processes associated with system administration and planning, acquiring, installing, and implementing of software and systems. Learning to work in teams in order to understand client needs, evaluate different possible solutions, pricing systems within budget constraints, and understanding continual improvement cycles are goals.

8112 Advanced Information Support Services (Capstone)
This course allows students to demonstrate management and implementation of various information, technology, and communication projects. Projects could take the form of enterprise information security plans that include identifying vulnerabilities and deciding what methods to use to achieve cybersecurity. Other projects include developing user training programs to enable simple problem resolutions, help-desk programs, system life-cycle programs that include planning, purchasing, implementing, and integrating of systems for continual improvement.

CDE Course Codes
Realignment 2021-22

Networking (Pathway 172)

8120 Introduction to Networking

This course introduces students to networking terminology and concepts as well as the principles of networking and various technologies, models, and protocols used in networking. Various types of network media and topologies will be introduced as well as network devices and their functions. Concepts covered include network standards of recognized organizations, Open System Interconnect (OSI) network layers, and transmission-control/internet protocol (TCP/IP) and the various network environments.

8121 Intermediate Networking (Concentrator)

This course allows students to perform hands-on tasking and planning for implementing network systems and/or subsystems after receiving safety training handling network hardware and power supplies. Students will evaluate networking tasks and select network components, media, and protocols to solve networking challenges. Other skills learned include network addressing, configuring, troubleshooting, security, monitoring network traffic and reading system indicators to troubleshoot problems, network administration and accounts, and system backup.

8122 Advanced Networking (Capstone)

This course allows students to demonstrate network administration and management skills in various networking projects. Possible projects include implementing network security tools to identify network vulnerabilities and performing network security penetration testing, assessment, proposing resolutions, and forming security plans for implementation. Other projects include identifying network threats to cyber security and plans for disaster prevention and recovery, analyzing client networking needs and requirements and developing possible alternatives to meet client needs.

Software and Systems Development (Pathway 174)

Systems Programming (Sub-Pathway 174A)

8130 Introduction to Systems Programming

This course will introduce the systems development process to students. Topics covered include the development life cycle, development models, specifications and requirements, working in development teams, use of versions, and diagramming processes using flowcharts and Unified Modeling Language.

8131 Intermediate Systems Programming (Concentrator)

This course provides students with the fundamental knowledge of computer programming for solving applied problems. Topics covered include using various programming languages, protocols, language syntax, data structures, object oriented concepts, interfaces, sorting and searching algorithms, and developing reports. Also covered, software testing, debugging, and improvement, integrated development using object-oriented programming and sensory information from robots to solve problems and meet challenges integrating STEM subjects.

8132 Advanced Systems Programming (Capstone)

This course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development. Students apply discrete programming skills to make a video game, a virtual pet, a sound editor, etc. and will explore careers in programming, including wireless applications for iPhone, Android, and applications. It also includes the study of data structures, design, and abstraction. Other topics might include developing databases and data modeling.

Web and Social Media Programming and Design (Sub-Pathway 174B)

- 8133 **Introduction to Web and Social Media Programming and Design**
This course will introduce students to the integration of various media into programming assignments including Web assignments. Students will also be introduced to the basic design elements used in interactive media. Other topics include encoding methods, using media design and editing software, animation and drawing software as well as image editors and three-dimensional design. Online content delivery process will be outlined as well as establishing online presence and e-commerce capabilities and Web security. Simple coding assignments using HTML and Cascading Style Sheets are used to teach basic Web design including the use of images, hyperlinks, tables, forms, video and audio.
- 8134 **Intermediate Web and Social Media Programming and Design (Concentrator)**
This course allows students to work on various projects such as Web-based businesses, e-portfolios, and mobile apps. Students will learn to create multimedia productions and presentations, implement standard graphical programming techniques for object movement, create graphical user interfaces, and apply graphic design principles and visual communication techniques. Other topics include capturing images by developing camera skills and making choices lenses, depth, motion and lighting, developing digitally generated and enhanced media, modeling, simulation, animation and image retouching.
- 8135 **Advanced Web and Social Media Programming and Design (Capstone)**
This course allows students to produce multimedia projects from concept (content gathering/research) to project completion (authoring/transmission) taking into account media that would be used by enterprises or mobile apps for marketing, corporate communication, and public use. As part of these projects students produce professional-level media, images, documents, audio, and video clips and software. Some projects might include Artificial Intelligence methods and behaviors to create web robots (bots) such as chat bots, etc.

Games and Simulations (Pathway 175)

- 8140 **Introduction to Games and Simulation**
This course introduces students to the history, art, and science of game development and the unique differences between automated versus non-automated gaming. Students will be introduced to game and simulation analysis, design, documentation, and development tools.
- 8141 **Intermediate Games and Simulation (Concentrator)**
This course allows students to work in teams to develop games or simulations. Students will learn skills such as storyboarding, plot, flow, and using functions. Learning how to implement standard game/simulation strategy and rules of play as well as integrating mixed media appropriate to the game design/simulation will be included. Other topics include design specifications, delivery, rules of play, navigation functionality, scoring, and other special features.
- 8142 **Advanced Games and Simulation (Capstone)**
This course allows students to learn and display mastery of advanced game design/simulation skills in projects they design individually or in teams. Advanced skills include applying programming skills for rendering single player or multiuser games or simulation projects, program control, branching, memory management, strategies, and implementation. Using Artificial Intelligence techniques such as finite state machines in nonplayer characters could be included.

MANUFACTURING AND PRODUCT DEVELOPMENT SECTOR (MAN)

The Manufacturing and Product Development sector provides a foundation for secondary students in California in manufacturing processes and systems, including graphic design production, machine tooling and forming, welding and materials joining, and product innovation and design. Students engage in an instructional program that integrates academic and technical preparation and focuses on career awareness, career exploration, and skill preparation in four pathways. The pathways emphasize real-world, occupationally relevant experiences of significant scope and depth in manufacturing. The knowledge and skills are acquired within a sequential, standards-based pathway program that integrates hands-on, project-based, and work-based instruction. Standards in this sector are designed to prepare students for entry to a career, postsecondary education, or advanced technical training.

Multiple Pathways (Pathway 999)

8200 Introduction to Manufacturing and Product Development

This introduction course provides students with the foundational concepts required for pursuing career pathways within this industry sector. The skills and content knowledge helps prepare students to continue their education in multiple pathway concentrator courses within this industry sector.

Graphic Production Technologies (Pathway 210)

8210 Intermediate Graphic Production Technologies (Concentrator)

This concentrator course builds upon the Manufacturing and Product Development introduction course and provides students with additional concepts and experiences required for career readiness and pursuing further education in the Graphic Production career pathway, which precedes this pathway's capstone course. This concentrator course leads to the capstone course in the Graphic Production pathway's sequence of courses.

8211 Advanced Graphic Production Technologies (Capstone)

This capstone course further builds upon the Manufacturing and Product Development introduction course and pathway concentrator course in the industry sector and is the final course taken in a sequence of courses which prepares students to work and pursue further education in multiple career pathways. This career technical education capstone course provides content, skill development and leadership training which prepare students for the world of work and to pursue further education such as industry certifications and a postsecondary degree.

Machining and Forming Technologies (Pathway 212)

8220 Intermediate Machining and Forming Technologies (Concentrator)

This concentrator course builds upon the Manufacturing and Product Development introduction course and provides students with additional concepts and experiences required for career readiness and pursuing further education in the Machining and Forming Technologies career pathway, which precedes this pathway's capstone course. This concentrator course leads to the capstone course in the Machining and Forming Technologies pathway's sequence of courses.

8221 Advanced Machining and Forming Technologies (Capstone)

This capstone course further builds upon the Manufacturing and Product Development introduction course and provides students with additional concepts and experiences required for career readiness and pursuing further education in Machining and Forming Technologies career pathway, which precedes this pathway's capstone course. This career technical education capstone course provides content, skill development and leadership training which prepare students for the world of work and to pursue further education such as industry certifications and a postsecondary degree.

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Welding and Materials Joining (Pathway 213)

8230 Intermediate Welding and Materials Joining (Concentrator)

This concentrator course builds upon the Manufacturing and Product Development introduction course and provides students with additional concepts and experiences required for career readiness and pursuing further education in Welding and Materials Joining career pathway, which precedes this pathway's capstone course. This concentrator course leads to the capstone course in the Welding and Materials Joining pathway's sequence of courses.

8231 Advanced Welding and Materials Joining (Capstone)

This capstone course further builds upon the Manufacturing and Product Development introduction and the Welding and Materials Joining concentrator courses. This career technical education capstone course provides content, skill development and leadership training which prepare students for the world of work and to pursue further education such as industry certifications and a postsecondary degree.

Product Innovation and Design (Pathway 216)

8240 Intermediate Product Innovation and Design (Concentrator)

This concentrator course builds upon the Manufacturing and Product Development introduction course and provides students with additional concepts and experiences required for career readiness and pursuing further education in Product Innovation and Design career pathway, which precedes this pathway's capstone course. This concentrator course leads to the capstone course in the Product Innovation and Design pathway's sequence of courses.

8241 Advanced Product Innovation and Design (Capstone)

This capstone course further builds upon the Manufacturing and Product Development introduction and the Product Innovation and Design concentrator courses. This career technical education capstone course provides content, skill development and leadership training which prepare students for the world of work and to pursue further education such as industry certifications and a postsecondary degree.

MARKETING, SALES, AND SERVICES SECTOR (MAR)

The Marketing, Sales, and Services sector is designed to align career-path course work with current and projected employment opportunities. There is a basic business foundation in this sector: marketing and innovation are two major competitive issues for business today.

Marketing includes the processes and techniques of identifying, promoting, and transferring products or services to consumers and is a function of almost every business. It exists within an environment of rapidly changing technology, interdependent nations and economies, and increasing demands for ethical and social responsibility. The three pathways in this sector (Marketing, Professional Sales, and Entrepreneurship/Self-Employment) emphasize training to meet the growing need for marketing professionals with skills in communication, small business, self-employment, advertising, marketing strategies, product and service management, and promotion and selling concepts. These pathways provide a firm foundation for advanced education, entry to a career, and success in the global marketplace. All industry sectors include entrepreneurship and marketing, and therefore students in the Marketing, Sales, and Services sector have a variety of career options.

Multiple Pathways (Pathway 999)

8300 Introduction to Marketing, Sales, and Service

This course content includes foundational concepts for each of the three pathways within the Marketing, Sales, and Services Sector including Entrepreneurship, Marketing, and Professional Sales. Subject matter includes market research, economics, marketing budgets, creative development and design, and marketing foundations/functions with emphasis on public relations, advertising, branding, promotion, product/service management, pricing and distribution.

Marketing (Pathway 244)

8310 Intermediate Marketing (Concentrator)

This concentrator course content builds on Introduction to Marketing, Sales, and Service course content. Specialized programs of study in this field may include sports marketing, hospitality marketing, advertising or market research. Students demonstrate the acquisition of content through the development of marketing plans and campaigns.

8311 Advanced Marketing (Capstone)

This capstone course content builds on previous course content and may focus on advanced strategies and marketing concepts that culminate in this final course of the Marketing pathway sequence. Specialized programs of study in this field may include sports marketing, hospitality marketing, and advertising or market research.

Professional Sales (Pathway 243)

8320 Intermediate Professional Sales (Concentrator)

This concentrator course content builds on Introduction to Marketing, Sales, and Service content. Knowledge and skills in theory and practice of sales designed to provide a professional foundation to those involved in personal selling careers, including the fundamentals of personal selling with an emphasis on customer behavior, persuasive presentation of ideas, products and services, and developing sales goals are covered. Students demonstrate the acquisition of content through the development of sales forecasts, presentations, etc. to drive sales activities.

8321 Advanced Professional Sales (Capstone)

This capstone course content builds on previous course content and may focus on advanced strategies and Professional Sales concepts that culminate in this final course of the Professional Sales pathway sequence.

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Entrepreneurship/Self-Employment (Pathway 241)

8330 Entrepreneurship/Self-Employment (Concentrator)

This concentrator course content builds on Introduction to Marketing, Sales, and Service course content. Knowledge and skills common to entrepreneurs and entrepreneurship, including the human characteristics vital for entrepreneurial thinking in a twenty-first century global world are covered. Entrepreneurial thinking may be applied to all industry sectors. Business knowledge and skills required for entrepreneurs as well as intangible skills and knowledge such as creativity and innovation skills are developed. Students demonstrate the acquisition of content through the research and development of business plans.

8331 Advanced Entrepreneurship/Self-Employment (Capstone)

This capstone course content builds on previous course content and may focus on advanced strategies and Entrepreneurial concepts that culminate in this final course of the Advanced Entrepreneurship/Self-Employment pathway sequence.

PUBLIC SERVICES SECTOR (PUB)

A public service is one that is provided by government to its citizens, either directly or through the financing of another entity to provide that service. Careers in public service are unique because they center on challenging issues that define the public agenda and involve the provision of vital services to the public—from local to international levels. Public service professions offer many career opportunities, including the following career pathways: Public Safety, Emergency Response, and Legal Practices. Students engage in an instructional program that integrates academic and technical preparation and focuses on career awareness, career exploration, skill preparation in the industry, and preparation for post-secondary education and training. Knowledge and skills are learned and applied within a sequential, standards-based pathway program that integrates classroom, laboratory, and project- and work-based instruction. Standards in this sector are designed to prepare students for technical training, postsecondary education, and entry-level employment.

Multiple Pathways (Pathway 999)

8400 Introduction to Public Services

This introduction course provides students with the awareness of a variety of career options and the foundational concepts in which they can begin to form future career choices that meet their individual career interest. Students are exposed to the specific requirements for various careers in the Emergency Response, Legal Practices, Public Safety, and the academic, physical and civic responsibility to achieve their career goals in a service career. Introductory courses provide the basic experiences and activities and leadership development that will set a foundation for entry into any one of the Public Services pathways at introductory level courses.

Public Safety (Pathway 232)

8410 Introduction to Public Safety (Introduction)

This course introduces theories, principals, and techniques used in occupations that fall under the heading of Public Safety including police, corrections, and homeland security. Policies, procedures, and skills needed in services that provide for the safety and security of people and property and prevention of theft and damage are included.

8411 Intermediate Public Safety (Concentration)

This course includes intermediate academic and skill development courses that describe the role of specific careers in Public Safety, including of science in solving crimes using an evidence-based system. Topics could include the history and role of the agency, laboratory and scientific evidence, processing evidence, establishing hypotheses and drawing conclusions. Students will also explore various career opportunities for decision making to move onto advanced coursework.

8412 Advanced Public Safety (Capstone)

This course is designed to prepare individuals for specific careers or jobs in Public Safety such as law enforcement, homeland security, and corrections. Content of these various courses would contain the essential knowledge and skill development of that specific career. Students will learn about the specific organizational structure of the oversight agency, laws regulations and policy for specific agencies, state laws and guidelines for career entry as well as certification hours, skill proficiency and employment requirement for the specific career in Public Safety. Students develop the skills both academically and physically to meet the demands of the specific career, the understanding of the importance of having a clean background check and the understanding of ethic, morals, and service to the community. Students will have to opportunity to participate in workplace learning, prepare for postsecondary options and qualify to take examinations and certification as set forth by California State regulation and agency requirements of age, skill, and knowledge.

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Emergency Response (Pathway 233)

8420 Introduction to Emergency Response (Introduction)

This course is the introductory course in the Emergency Response Pathway and provides students with decision making information about careers in Emergency Response careers or to pursue advanced skill training in Emergency Services. Course content includes classroom instruction, hands-on training and community experience. This course is designed to provide students with an understanding of the variety of agencies, employment opportunities and necessary skill requirements in the many career in Emergency Services. Information included will be will be in the field of fire and emergency operations, disaster response and emergency management, latest industry principles, theory, and best practices. Students learn tactical operations, safety, leadership, and community outreach and response techniques.

8421 Intermediate Emergency Response (Concentration)

This course provides students with an outline of the Emergency Medical Services (EMS) system, state and community emergency systems, introduces students to environment citizen emergency assessment, skill development, as well as provides pathophysiology and immediate action and care for various emergencies. It covers techniques of emergency environmental, community action and medical care presently considered within the responsibilities of the first responders, fires service careers, and emphasizes the development of student skills in recognition of symptoms of illnesses and injuries and proper procedures of emergency care. Emphasis is placed on communication, operations, community action and patient care in accordance with the California State EMS Agencies.

8422 Advanced Emergency Response (Capstone)

This course is designed to prepare individuals for specific careers or jobs in Emergency Services. Content of these various courses would contain the essential knowledge and skill development of that specific career. Students will learn about the specific organizational structure of the oversight agency, laws regulations and policy for specific agencies, state laws and guidelines for career entry as well as certification hours, skill proficiency and employment requirement for the specific career in Emergency Services. Students will have the opportunity to participate in workplace learning, prepare for postsecondary options and qualify to take examinations and certification as set forth by California State regulation and agency requirement of age, skill, and knowledge.

Legal Practices (Pathway 231)

8430 Introduction to Legal Practices

This course allows students to survey the range of legal careers including paralegals, attorneys, social justice advocates, mediators, and other occupations. The course provides students with a basis for understanding the American political and legal systems, with a focus on legal ideas and the legal process, how the law works and the sources of US law. Legal research and writing are introduced.

8431 Intermediate Legal Practices (Concentrator)

This concentrator course is designed to provide students specific content knowledge with industry skills and leadership development within the Legal Practices pathways. Courses are designed to provide an understating and application of laws that affect everyday life; families, business, social decision making and the relationship to policies. Course could include content knowledge within historical, philosophical, and institutional contexts of social and economic justice and human rights.

8432 Advanced Legal Practices (Capstone)

This capstone course allows students to examine how statutes and policies are developed to safeguard society throughout history and the relationship to today legal practices. Students will understand the analysis of civil rights and liberties, and the ways courts and legislators deal with constitutional questions. Student will develop the skill and knowledge relevant to the needs of modern legal practice, entry into legal practice careers, necessary pathways and preparation into postsecondary advancement and future job prospects and the progression to higher level careers in Legal Practices.

TRANSPORTATION SECTOR (TRA)

This sector is designed to provide a foundation in transportation services for all industrial technology education students in California. There are eight focus areas that fall under the Transportation sector, each with different career opportunities. The focus areas are On-Road; Off-Road; Stationary; Rail; Water/Sea; Air; Space; and Small Engines and Specialty Equipment. The pathways in the Transportation sector emphasize real-world, occupationally relevant experiences of significant scope and depth in three areas: Operations, Structural Repair and Refinishing, and Systems Diagnostics, Service, and Repair. The standards are designed to integrate academic and technical preparation and focus on career awareness, career exploration, and skill preparation in the three pathways. Integral components include classroom, laboratory, and hands-on contextual learning; project- and work-based instruction; and leadership development. The standards in this sector prepare students for continued training, postsecondary education, and entry to a career.

Multiple Pathways (Pathway 999)

8500 Introduction to Transportation

This course includes foundational concepts required for pursuing further education in each of the three pathways within the transportation sector including: Operations, Structural Repair and Refinishing, and Systems Diagnostics, Service, and Repair. Instructional content of this course may lead the student directly into an intermediate pathway course within the transportation sector.

Operations (Pathway 223)

8510 Introduction to Operations

This introductory course will offer first year students a unique perspective of the role the transportation industry has on the global economy. Students will be made aware of the range or diversity of employment opportunities available within this pathway such as the distribution, logistics, and warehousing of goods, materials and mass transit. The student will also be made aware of all the forms of transportation necessary to achieve these efforts.

8511 Intermediate Operations (Concentrator)

This concentrator level course provides more specific areas of focus such as planning, management, and the infrastructure required for the distribution and logistics of materials and products. The instruction will also concentrate on operating and managing facilities designed for the movement of goods, materials and mass transit.

8512 Advanced Operations (Capstone)

This capstone course will provide students with the opportunity to function in a variety of roles within this pathway. Students will demonstrate competency in the knowledge and skills acquired in introductory and concentration level courses. Students will participate in work-based learning opportunities which can lead to internships. Students that successfully complete the course of study will qualify for industry recognized certifications. Upon completion of this course, students will be prepared for an entry level position at a facility that provides the movement of goods, materials, and/or mass transit.

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Structural Repair and Refinishing (Pathway 220)

8520 Introduction to Structural Repair and Refinishing

This introductory course will offer first year students a unique perspective of the skills and knowledge required for an entry level position in the structural repair and refinishing sector of the transportation industry. The instruction will concentrate on the fundamentals of collision repair and refinishing of motor driven vehicles. This will include an introduction to panel repair, sanding, taping, masking, and painting. Spot, MIG, and Oxy/Acetylene welding will be introduced. Safety and proper tool use and identification is stressed.

8521 Intermediate Structural Repair and Refinishing (Concentrator)

This concentrator level course will build on the knowledge and skills obtained in the introductory level course. This course provides more specific areas of focus such as proficiency in spot and MIG welding, full panel replacement and preparation as well as painting and refinishing. The student will also become familiar with the entire repair process from estimation through to final fit and finish. Students will also become familiar with interior, upholstery, and detailing work.

8522 Advanced Structural Repair and Refinishing (Capstone)

This capstone level course will provide students with the opportunity to function in a variety of roles within this pathway. Students will demonstrate competency in the skills and knowledge acquired in introductory and concentration level courses. Students will participate in work-based learning opportunities which can lead to internships. Students that successfully complete the course of study will qualify for industry recognized certifications. Upon completion of this course, students will be prepared for an entry level position at a vehicle collision and refinishing facility.

Systems Diagnostics, Service, and Repair (Pathway 221)

8530 Introduction to Systems Diagnostics, Service, and Repair

This introductory course will offer first year students a unique perspective of the skills and knowledge required for an entry level position in the systems diagnostics, service, and repair of vehicles of the twenty first century. The instruction will concentrate on but will not limited to the fundamentals of shop safety, tool identification and proper use along with basic repairs and maintenance of modern vehicles.

8531 Intermediate Systems Diagnostics, Service, and Repair (Concentrator)

This concentrator level course provides more specific areas of focus such as system diagnosis, advanced service, maintenance, and repair. The instruction will also concentrate on support systems such as engine performance, braking, steering, cooling, and electrical/electronic components. The student will also be exposed to transmissions and differentials.

8532 Advanced Systems Diagnostics, Service, and Repair (Capstone)

This capstone level course will provide students with the opportunity to function in a variety of roles within this pathway. Students will demonstrate competency in the skills and knowledge acquired in introductory and concentration level courses. Students will participate in work-based learning opportunities which can lead to internships. Students that successfully complete the course of study will qualify for industry recognized certifications. Upon completion of this course, students will be prepared for an entry level position at a vehicle repair facility.