



| Pathway | CTECS | Virginia | Oklahoma | Vermont | Missouri | Illinois | Air Force |
|---|--|---|--|--|--|---|-----------|
| Food Products and Processing Systems | Food Science/Processing Employee | | | | Food Science and Technology | Agriculture Lab and Field Technician | |
| Plant Systems | Ornamental Horticulture Production Occupations | Turf Grass Establishment and Maintenance Specialty Horticulture Arts Landscaping Horticulture Sciences Greenhouse Plant Production and Management Floriculture Floral Design I Floral Design II Biotechnology Foundations Biotechnology Applications in Agriculture Biological Applications in Agriculture Agricultural Mechanics and Basic Plant Science I Advanced Turf Grass Applications 8054 | Florist Assistant Nursery Technician Field Technician Turf Technician Forestry Aide Plant Science/ Agronomy | Agriscience Technology - PLANT SCIENCETECHNOLOGY Agriscience Technology - GENERAL SKILLS - AGRICULTURE Diversified Agriculture - Plant Science Horticulture Science And Technology - Arborist Services Horticulture Science And Technology - Fruit And Vegetable Production Horticulture Science And Technology - Fundamentals Of Horticulture (All Students) Horticulture Science And Technology - Greenhouse Operation Horticulture Science And Technology - Landscape/Turf Services Horticulture Science And Technology - Nursery Operation Horticulture Science And Technology - Retail Florist Introductory Agriscience And Technology - Plant Science Technology | Advanced Crop Science Agriculture Science I Agriculture Science I - Supplement Agriculture Science II Floristry Forest Management Greenhouse Operation and Management Horticulture Landscaping and Turf Management Exploring Agriculture in America | Floristry Cluster Greenhouse/ Nursery Cluster Landscape Technician Cluster Retail Garden Center Cluster Row Crop Production Cluster | |



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|--|-------|---|-----------------------------|---|--|--------------------------|-----------|
| Animal Science | | Veterinary Science | Animal Science | Agriscience Technology - ANIMAL SCIENCE | Advanced Livestock Production and Management | Beef Production Cluster | |
| | | Small Animal Care I, II | Groom | Dairy Production | Animal Care Assistant | Swine Production Cluster | |
| | | Equine Management Production | Level I Trainer | Diversified Agriculture - Animal Science | Animal Care Assistant | | |
| | | Agricultural Mechanics and Basic Animal | Breeding Farm Technician | Equine Science And Technology - Business Management | Fish and Wildlife Management | | |
| | | Veterinary Assistant I, II, III | Animal Production Assistant | Equine Science And Technology - Fundamentals Equine Science And Technology - Marketing Introductory Agriscience And Technology - Animal Science | Animal Science | | |
| Power, Structural, and Technical Systems | | Small Engine Repair | Agricultural Mechanics | Agricultural Mechanics - AGRICULTURALPOWER MECHANICS SPECIALIZATION | Small Engine Technician | | |
| | | General Mechanics for the Disadvantaged | | Agricultural Mechanics - ELECTRICAL/ELECTRONIC SYSTEMS SPECIALIZATION | Welding (Agriculture) | | |
| | | Farm Equipment Operator | | Agricultural Mechanics – EQUIPMENT OPERATION SPECIALIZATION | Agriculture Machinery Service Technician | | |
| | | Agricultural Mechanization Sales and Service IV | | Agricultural Mechanics - General Skills | Agriculture Construction | | |
| | | Agricultural Power and Equipment III | | Agricultural Mechanics - HYDRAULIC SYSTEMS SPECIALIZATION | Agriculture Machinery | | |
| | | Agricultural Production Management IV | | Agricultural Mechanics - POWER TRAIN SYSTEMS SPECIALIZATION | Agriculture Management and Economics | | |



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|---|-------|---|----------|---|---|--|-----------|
| Power, Structural, and Technical Systems (Cont.) | | Agricultural Production Technology III Agriscience and Technology Advanced Agriculture Mechanization V | | Agricultural Mechanics - SMALL ENGINE SPECIALIZATION Agriscience Technology - AGRICULTURAL MECHANICAL TECHNOLOGY Diversified Agriculture - Mechanical Science Horticulture Science And Technology - Horticulture Mechanics Introductory Agriscience And Technology - Agri-Mechanical Technology | Agriculture Power I Agriculture Power II Agriculture Structures | Agriculture Machinery Service Technician | |
| Natural Resource Systems | | Natural Resources Business Management V Introduction to Natural Resources III | | Environmental And Natural Resources Technology - Core Environmental And Natural Resources Technology - Environmental Technology Specialty Forestry And Natural Resources | Biotechnology - Applications in Agriculture | | |
| Environmental Service Systems | | Introduction to Agriscience Forestry, Wildlife, and Soil Management IV Ecology and Environmental Management | | Agriscience Technology - ENVIRONMENTAL/CONSERVATION SCIENCE Introductory Agriscience And Technology - Environmental/Conservation Science Environmental And Natural Resources Technology - Natural Resources Conservation Specialty | | | |



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| Agribusiness Systems | Farm and Ranch Business Manager | Operating the Farm Business IV | Agricultural Business/Marketing | Agriscience Technology – AGRIBUSINESS MANAGEMENT AND MARKETING | Processing and Marketing Forest Products | Agriculture Sales and Marketing Cluster | |
| | | Agricultural Business Operations IV 8024 | Communications/Leadership | Agriscience Technology - CAREERS | Agriculture Marketing | | |
| | | Agricultural Business Management V 8026 | Entry Level Agricultural Communications Specialist: Oral And Written Communication | Agriscience Technology – LEADERSHIP DEVELOPMENT | Agriscience Sales, Marketing and Management | | |
| | | Agricultural Business Fundamentals III 8022 | Entry Level Agricultural Communications Specialist; Advertising/Marketing | Agriscience Technology - PURPOSES | | | |
| | | Agriscience Exploration | Entry Level Agricultural Communications Specialist: Radio/TV - Electronic Media | Diversified Agriculture - Marketing | | | |
| | | Agricultural Education for the Disadvantaged | | Diversified Agriculture - Small Wood Lot Management | | | |
| | | Agricultural Education for the Disabled 8053 | | Diversified Agriculture- Business Management | | | |
| | | | | Horticulture Science And Technology - Business Management And Record Keeping | | | |
| | | | | Horticulture Science And Technology - Sales, Merchandising, And Marketing | | | |
| | | | | Introductory Agriscience And Technology - Agribusiness Management And Marketing | | | |
| | | Introductory Agriscience And Technology - Leadership Development | | | | | |
| | | Introductory Agriscience And Technology - Careers | | | | | |
| | | Introductory Agriscience And Technology - General Skills | | | | | |
| | | Introductory Agriscience And Technology - Purposes | | | | | |



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| Design/Pre-Construction | Computer Assisted Drafting & Design (CADD) | Drafting I, II, III - 8530, 8531, 8532 | Basic Drafter | Architectural Engineering Technology/Technician | Cadd/Engineering Design - Advanced Cadd Skills | Mechanical Drafting Cluster |
| | Construction Occupations | Engineering Drawing and Design | Architectural Drafter | Civil Engineering/Civil Technology/Technician | Cadd/Engineering Design - Basic Cadd Skills | Architectural Drafting Cluster |
| | | Technical Drawing and Design | Electronic/Electrical Drafter | Drafting | Cadd/Engineering Design - Fundamental Computer Skills | |
| | | Architectural Drawing and Design | Civil Drafter | | Cadd/Engineering Design - Fundamental Drafting Skills | |
| | | | Structural Drafter | | Mechanical Drafter | |
| | | | Mechanical Drafter | | | |
| | | | Process Pipe Drafter | | | |
| Construction | Bricklayer | Basic Carpentry (8600) | Heating And Air Conditioning | Air Conditioning, Heating and Refrigeration | Building Trades - Basic Construction Skills (Core Instruction) | Industrial Maintenance General Maintenance |
| | Cabinetmaker | Bricklayer (8511) | Commercial Carpentry Occupational Competency Guide; Commercial Form Carpenter | Cabinetmaking | Building Trades - Carpentry Level I | HVAC/R Technician Cluster |
| | Carpenter | Building Trades I, II, III (8515, 8516, 8517) | Commercial Carpentry Occupational Competency Guide; Commercial Frame Carpenter | Carpentry | Building Trades - Carpentry - Level II | Welding |
| | Drywall Installer | Cabinetmaking I, II, III (8604, 8605, 8606) | Commercial Carpentry Occupational Competency Guide; Commercial Finish Carpenter | Construction Equipment Operator | Building Trades - ii. Masonry | |
| | House Electrician | Carpentry I, II, III (8601, 8602, 8603) | Commercial Carpentry Occupational Competency Guide; Master Commercial Carpenter | Electrical Trades | Building Trades - iii. Concrete Finishing | |
| | Plumber | Electricity I, II, III (8533, 8534, 8535) | Residential Carpentry Occupational Competency Guide; Residential Form Carpenter | Masonry | Building Trades - iv. Plumbing | |
| | Rofer | Heating, Ventilation, Air Conditioning, and Refrigeration I, II, III (8503, 8504, 8505) | Residential Carpentry Occupational Competency Guide; Residential Frame Carpenter | Plumbing | Building Trades - v. Electrical | |



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| Construction (Cont.) | Heating, Air Conditioning, and Refrigeration Technician | Masonry I, II, III (8512, 8513, 8514) | Residential Carpentry Occupational Competency Guide; Residential Finish Carpenter | Welding (IE) | Building Trades - Vi. Hvac | | |
| | Sheet Metal Worker | Plumbing I, II, III (8551, 8552, 8553) | Residential Carpentry Occupational Competency Guide; Master Residential Carpenter | | Building Trades - Vii. Industrial Maintenance ? Level I | | |
| | Welder | Utility/Heavy Construction I, II, III (8616, 8617, 8618) | Welding; Shielded Metal Arc Welder (SMAW) | | Building Trades - Viii. Industrial Maintenance ? Level Ii | | |
| | Construction Occupations | Welding I, II, III 8672, 8673, 8674 Construction Technology | Welding; Gas Metal Arc Welder (GMAW) | Welding; Flux-Cored Arc Welder | Electrical Occupations | Electrical Occupations - General Skills | |
| | | | Welding; Gas Tungsten Arc Welder | | Electrical/Plumbing Occupations - Electrical Occupations | | |
| | | | Welding; Combination Welder | | Electronics Occupations | | |
| | | | Heating, Ventilation, And Air Conditioning Occupational Competency Guide; HVAC/R Installation Technician | | Heating, Air-Conditioning, And Refrigeration Technician | | |
| | | | Electrical Trades: Residential Electrician's Assistant | | Millwork/Cabinetmaking - Business Management And Record Keeping | | |
| | | | Electrical Trades: Commercial/Industrial Electrician's Assistant | | Millwork/Cabinetmaking - General Skills | | |
| | | | Construction: Carpentry Occupational Competency Guide; Carpentry Trainee | | Millwork/Cabinetmaking - Sales, Merchandising, And Marketing | | |
| Cabinetmaking: Cabinetmaker Helper | | | | Plumbing And Heating | | | |



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| Construction (Cont.) | | | Cabinetmaking: Residential Cabinetmaker: Commercial Construction: Brickmasonry Occupational Competency Guide; Construction Trainee Construction: Brickmasonry Occupational Competency Guide; Mason Tender Construction: Brickmasonry Occupational Competency Guide; Brickmasonry Trainee Plumbing Occupational Competency Guide; Plumbing Technology Trainee | | Welding/Metal Fabrication | |
| Maintenance/Operations | Building Repairer House Electrician Plumber Roofer Heating, Air Conditioning, and Refrigeration Technician Construction Occupations | Building Management I, II, III (8590-92) Basic Carpentry (8600) Bricklayer (8511) Building Trades I, II, III (8515, 8516, 8517) Cabinetmaking I, II, III (8604, 8605, 8606) Carpentry I, II, III (8601, 8602, 8603) Electricity I, II, III (8533, 8534, 8535) | Heating, Ventilation, And Air Conditioning Occupational Competency Guide; HVAC/R Service Technician Building Maintenance Technician - Carpentry Building Maintenance Technician - Plumbing Building Maintenance Technician - Hvac Building Maintenance Technician - Electrical | Building Maintenance Industrial Maintenance | Electrical Occupations Plumbing And Heating Heating, Air-Conditioning, And Refrigeration Technician Building Trades - Viii. Industrial Maintenance ? Level Ii | Industrial Maintenance General Maintenance HVAC/R Technician Cluster Welding |



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| Maintenance/ Operations (Cont.) | | Heating, Ventilation, Air Conditioning, and Refrigeration I, II, III (8503, 8504, 8505) Masonry I, II, III (8512, 8513, 8514) Plumbing I, II, III (8551, 8552, 8553) Welding I, II, III 8672, 8673, 8674 Industrial Cooperative Training I, II, III, IV - 8901, 8902, 8903, 8904 Industrial Maintenance Technology I, II, III (8575, 8576, 8577) | | | | |



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| Audio and Video Technology and Film | Audio Visual Design Occupations Audio Visual Technician Occupations | Digital Visualization Video and Media Technology | | | Video Production | | |
| Printing Technology | Multimedia Designer/Animator/ Developer | | Imaging, Printing, And Finishing Technician Multimedia Technician | Graphic Communications/ Printing | | Imaging/Pre-Press Cluster | Printing Management |
| Visual Arts | Multimedia Designer/Animator/ Developer | Graphic Communications Systems Imaging Technology Basic Photography (8610) Commercial Photography I, II, III (8607, 8608, 8609) | Technical Illustrator/Animator Imaging, Printing, And Finishing Technician | Commercial Art Commercial Art Certificate | Careers In Design And Illustration Design And Illustration Graphic Arts Stone Arts Competencies | | Still Photographic (replaces study 2292) Visual Information (replaces study 2255) Visual Information Production Documentation |
| Performing Arts | | | | | Performing Arts | | |
| Journalism and Broadcasting | | Communication Systems Radio Communications I, II, III (8640, 8641, 8642) | | Radio and Television Broadcasting Technology | | | Radio and Television Broadcasting Public Affairs (replaces study 2287, portion 3N0X1) |
| Telecommunications | | Telecommunications I (8650) Telecommunications II (8651) Television Production I, II, III (8688, 8689, 8690) | Telecommunications Technician Telecommunications Core | | | Telecommunications Technician Cluster | Information Management (replaces study 2311) Communications-Computer Systems Operations, Communications-Computer Systems Control (replaces study 2348, portion 3C2X1) Communications-Computer Systems Planning and Implementation Communications-Computer Systems Programming (replaces study 2363) Ground Radio Communications (replaces study 2287, portion 3N0X2) |





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| Management | Business Management Occupations Skill Standards | Business Management (6135/36wks) | Entrepreneur | Business Management | Ba Tech - Core (Management Concentration) | Accounting Services Cluster | Contracting |
| | Hotel/Motel Management and Related Occupations Small Business Entrepreneur | Business Management (6136/18wks) International Baccalaureate for Business and Management (IB6135/36wks) | Manager Trainee Hospitality Hotel/Motel Sales And Marketing: Sales Assistant | Introduction to Business | | | |
| | | Make It Your Business (6110/9wks) | Entrepreneurship Specialist | | | | |
| | | Make It Your Business (6110/12wks) | Hospitality Hotel/Motel Sales And Marketing: Convention Service Manager | | | | |
| | | Make It Your Business (6110/6wks) | Hospitality Hotel/Motel Sales And Marketing: Catering Manager | | | | |
| | Make It Your Business (6111/18wks) | Hospitality Hotel/Motel Sales And Marketing: Sales Manager | | | | | |
| Business Financial Management and Accounting | Accounting Clerk | Accounting (6320/36wks) | Accounting Filing Clerk | Accounting I | Accounting & Automated Accounting Competencies - General Skills | | Equal Opportunity and Treatment |
| | Business Financial Occupations Skill Standards | Advanced Accounting (6321/36wks) | Accounting Data Entry Clerk | Accounting II | Accounting & Automated Accounting Competencies - Work Place Skills | | Financial Management, Financial Analysis |
| | Administrative Support Occupations Skill Standards | | Billing Clerk | Business and Personal Law | Ba Tech - Core (E-Business) | | Financial Management and Comptroller |
| | | | Inventory Control Clerk | Business Communications | | | Manpower and Quality Management |
| | | | Accounts Payable Clerk | Business Computer Programming | | Ba Tech -Core (Financial Support Occupations) | Operations Resources Management (replaces study 2231) |
| | | Accounts Receivable Clerk | Business Economics | | Ba Tech Foundation - Core | Operations, Readiness | |



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| Business Financial Management and Accounting (Cont.) | | | Account Clerk Full-Charge Bookkeeper Payroll Accounting Clerk Financial Services Specialist Operations Clerk/Bookkeeper Financial Services Assistant | Financial Management International Business Personal Finance | Bookkeeping, Accounting, Microcomputer Accounting | | |
| Human Resources | | | Human Resources Representative | | | | Personnel (replaces study 2216) Personnel Systems Management |
| Business Analysis | | Business Individualized Program Business Law (6131/36wks) Business Law (6132/18wks) | | | | | |
| Marketing | Fashion Merchandising Occupations | Principles of Business and Marketing (6115/36wks) Principles of Business and Marketing (6116/18wks) | Restaurant Marketing Specialist Advertising Services Specialist Food Marketing Specialist Salesperson Apparel And Accessories Specialist General Merchandise Retailing Specialist Assistant Buyer Marketing Assistant | Business Technology | | | |

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| Administrative Support and Information Support | Bank Customer Service Teller | Office Administration (6621/36wks) | Administrative Assistant I | Computer Business Applications | Microcomputer Accounting | Administrative Support Cluster | Printing Management |
| | Cashier/Checker | Office Administration (6622/18wks) | Administrative Assistant II | Digital Communications | Technical Skills Competencies - Administrative And Information Support Occupations Concentration | | Readiness (replaces 3E9X1 portion of study 2181) |
| | Computer Operations | Office Specialist I (6740/36wks) | Receptionist | Electronic-Business | Technical Skills Competencies - E-Business Concentration | | Supply Management, Supply Systems Analysis |
| | Entrepreneurship | Office Specialist II (6741/36wks) | Customer Service Representative | Graphic Arts/Desktop Publishing | Technical Skills Competencies - Financial Occupations Concentration | | |
| | Secretarial Occupations | Office Specialist III (6742/36wks) | Legal Secretary Assistant | Keyboarding | Technical Skills Competencies - Management Occupations Concentration | | |
| | | Word Processing (6625/36wks) | Accredited Legal Secretary | Multimedia | Ba Tech-Core (Administrative And Information Support Occupation Programs) | | |
| | | Notetaking (6241/36wks) | | | Network Administration | | |
| | Notetaking (6242/18wks) | | | Web Design | | | |



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| Financial and Investment Planning | Business Financial Occupations Skill Standards | Finance (6120/36wks, 6121/18wks) | Financial Services Specialist | Personal Finance | | | Financial Management and Comptroller |
| Business Financial Management | Business Financial Occupations Skill Standards | Business Individualized Program | Financial Services Assistant | Financial Management | | | Financial Management, Financial Analysis |
| | Entrepreneurship | Business Management (6135/36wks) | | | | | |
| | Small Business Entrepreneur | Business Management (6136/18wks) | | | | | |
| Banking and Related Services | Bank Customer Service Teller | | Teller | | | Banking Cluster | Operations Resources Management (replaces study 2231) |
| Insurance Services | | | Insurance Customer Service Representative | | | Insurance Cluster | Operations, Readiness |



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| Therapeutic Services | Emergency Medical Technician | Dental Assistant I, II (8328, 8329) | Practical Nursing | Health Care Assistants (Core Competencies) | Dental Assistant (Vt) | Dental Assistant | Aeromedical |
| | Health Care Assistant | Emergency Medical Technician I, II, III (8333,8334, 8335) | Home Health/Long Term Care | Dental Aide | Health Careers | Dental Hygienist | Aerospace Physiology |
| | Multiskilled Health Technician | Health and Medical Sciences Exploratory | Long Term Care | Dental Assisting/Assistant | | Nursing Cluster (Revised 2002) | Aircrew Life Support (replaces study 2289) |
| | Surgical Technician | Health Assistant I | Home Health Care | Dental Hygiene/Hygienist | | Occupational Therapy Cluster | Biomedical Equipment (replaces study 2190) |
| | Therapy Occupations | Health Assistant II (Psychiatric Aide) | Developmentally Disabled Care | Dietary Aide in Health Care Facilities | | Physical Therapist Assistant Cluster | Cardiopulmonary Laboratory (replaces study 2244) |
| | | Home Health Aide | Residential Care | Emergency Medical Technology/Technician Home Health Aide | | | Dental Assistant |
| | | Introduction to Health and Medical Sciences | Adult Day Care | | | | Dental Laboratory |
| | | Medical Assistant I, II (8345, 8346) | Medication Aide | Nurse Assistant | | | Mental Health Service |
| | | Medical Terminology | Physical Therapy Aide | Nursing - Registered Nursing Training | | | Occupational Therapy (replaces study 2248) |
| | | Nursing Assistant I, II (8360, 8362) | Physical Therapist Assistant | Occupational Therapy Aide | | | Optometry and Ophthalmology (replaces study 2328) |
| | | Pharmacy Technician | Respiratory Therapy Technician | Occupational Therapy Assistant | | | Orthotic |
| | | Physical Therapy--Occupational Therapy | Medical Assistant | Pharmacy Aide | | | Pararescue (replaces study 2290) |
| | | Surgical Technologist I, II (8351, 8352) | Massage Therapy | Physical Therapist Aide | | | Pharmacy (replaces study 2300) |
| | | | Massage Therapy Exploration | Physical Therapy Assistant | | | Physical Therapy (replaces study 2303) |
| | | | Athletic Training | Practical Nursing | | | Surgical Service |
| | | | | Radiology Aide | | | |
| | | | | Respiratory Therapist Aide | | | |
| | | | | Surgical Technology/Technologist | | | |



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| Diagnostic Services | | | Radiology Aide Radiographer Medical Laboratory Technician Phlebotomy Technician Sonography Mammography | Medical Radiologic Technology Science/Radiation Medical Clinical Assistant Clinical Medical Laboratory Technician Diagnostic Medical Sonography/Sonographer | | Clinical Laboratory Science/ Biotechnology Cluster | Diagnostic Imaging (replaces study 2256) Diet Therapy Histopathology Medical Lab, Histopathology Medical Laboratory Medical Materiel (replaces study 2279) |
| Health Infomatics | Medical Transcription | Medical Systems Administration (6730/36wks) | Medical Transcriptionist Medical Coder Medical Record Technician | Medical Transcription/Transcriptionist Health Information/Medical Records Sign Language Interpretation/Interpreter Activity Director Administrative Medical Assistant | Medical Records Specialist Health Information Management Program Cluster | Medical Office Cluster | Public Health (replaces study 2257) Health Services Management (replaces study 2196) Medical Service (replaces study 2246) |
| Support Services | | | Home Health Administrator | Housekeeper in Health Care Facilities Funeral Services and Mortuary Science | | | |
| Biotechnology Research and Development | Bio-Technician Biomedical Equipment Technician | Biotechnology Foundations | Electronics; Biomedical Electronics Technician | | | | |



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| Restaurants and Food and Beverage Services | | Culinary Arts I, II (8275, 8276) | | ProStart Program, Year 1 ProStart Program, Year 2 | Hospitality And Tourism - Foundation Core Competencies | | |
| Lodging | Hotel/Motel Management and Related Occupations | Hospitality Services I, II | Hospitality Hotel/Motel Sales And Marketing: Catering Manager Hospitality Hotel/Motel Sales And Marketing: Sales Manager | | Lodging Concentration Area- Technical Skills | Housekeeping Management Cluster Lodging Cluster | |
| Travel and Tourism | Tourism Specialist | Introduction to Food Occupations | Hospitality Hotel/Motel Sales And Marketing: Convention Service Manager | | Restaurant, Food And Beverage Services Concentration Area: Tech Skills Competencies | | |
| Recreation, Amusements, and Attractions | | Introduction to Hospitality, Tourism, and Recreation Hotel-Motel Marketing (8160, 8161) Sports, Entertainment, and Recreation Marketing (8175, 8176) Travel and Tourism Marketing (8165, 8166) | | | Travel And Tourism Concentration Area - Tech Skills Competencies | Meeting Professional Cluster | |



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| Early Childhood Development and Services | Child Care & Guidance | All Aspects of Industry for the Work of the Family Early Childhood Education I and II Exploring Work and Family Roles | Lead Teacher Child Care Director Infant/Toddler School-Age Occupational Services; Child Care Support Staff | Career and Family Leadership Child Care Provider Assistant Child Development, Care and Guidance - Advanced | | |
| Counseling and Mental Health Services | | Family and Human Services | Nanny | | | |
| Family and Consumer Sciences | Commercial Cook | Family Relations | Intergenerational Care Provider | Discovering Family and Consumer Sciences | Human Services | |
| | Home and Career Skills National Standards for Family & Consumer Sciences Ed. Parenting | Fashion Design Occupations I, II GRADS (Graduation, Reality, And Dual-Role Skills) Hospitality Services I, II Individual Development Interior Design Introduction to Family and Human Services Introduction to Fashion Design and Marketing | Occupational Services; Housekeeper/Custodian Occupational Services; Dining Attendant/Bus Person Occupational Services; Kitchen Helper Occupational Services; Sandwich Maker Occupational Services; Cashier Long Term Care Home Health Care Developmentally Disabled Care Residential Care Adult Day Care | Career Development Entrepreneurship Family & Consumer Sciences Resource Management Family and Individual Health Family Living and Parenthood | | |



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| Personal Care Services | | Introduction to Food Occupations Cosmetology I, II, III - 8527, 8528, 8529 Nail Technician - 8692, 8693 Barbering I, II, III (8740-42) Beauty Salon Assistant (8546) | | Cosmetology Manicurist Facialist | Cosmetology | |
| Consumer Services | Baker/Pastry Cook Caterer | Introduction to Hospitality, Tourism, and Recreation Introduction to Housing, Home Furnishings, and Design Occupations Life Planning Nutrition and Wellness Parenting Resource Management Work and Family Management Commercial Sewing I, II, III (8524, 8525, 8526) | | Culinary Arts Food Science Food Service Worker Nutrition and Wellness Personal Finance Process Skills ProStart Program, Year 1 ProStart Program, Year 2 | | |



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| Network Systems | | Advanced Computer Network Software Operations (6651/36wks) | Network Support Specialist | Computer Network Technician | Info Tech - Network Management Concentration | |
| | | Computer Network Software Operations (6650/36wks) | | Network Administration | Info Tech - Networking | |
| | | Computer Networking Hardware Operations I (Cisco) (8542) | | | Info Tech - Networking & Operating Systems | |
| | | Computer Networking Hardware Operations II (8543) | | | | |
| | | Computer Networking Hardware Operations III (8544) | | | | |
| | | Computer Networking Hardware Operations IV (8545) | | | | |
| Information support and Services | Computer Operations | Advanced Computer Information Systems (6613/36wks) | Systems Support Specialist | Computer Network Technician | Info Tech - Computer Technology Systems | Information Technology Design/Build Cluster |
| | Computer Equipment Repair | Computer Solutions (6609/12wks) | Electronics; Business Machines Service Technician | | Info Tech - Hardware Service Technology | Information Technology End User Applications |
| | | Computer Solutions (6609/6wks) | Microcomputer Repair, Support, And Networking Technician | | Info Tech - Foundation Competencies | Information Technology Operate Cluster |
| | | Computer Solutions (6610/36wks) | | | Info Tech - Operating System Technologies | |
| | | Digital Input Technologies (6160/18wks) | | | | |
| | | Digital Input Technologies (6161/36wks) | | | | |
| | | Computer Maintenance (8621) | | | | |
| | | Information Technology (IT) Fundamentals (6670/36wks) | | | | |
| | | International Baccalaureate Information Technology in a Global Society (IB6613/36wks) | | | | |
| | | Computer Systems Technology I, II, III - 8622,8623, 8624 | | | | |



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| Web and Digital Communication | Multimedia Designer/Animator/ Developer | Advanced Design, Multimedia, and Web Technologies (6631/36wks) | Imaging, Printing, And Finishing Technician | Graphic Arts/Desktop Publishing | Info Tech - Web Page Design And Implementation | |
| | | Advanced Design, Multimedia, and Web Technologies (6633/18wks) | | Multimedia | Info Tech - Interactive Media Concentration | |
| | | Advanced Computer Information Systems (6615/18wks) | | Multimedia Technician | Web Design | |
| | | Design, Multimedia, and Web Technologies (6632/18wks) | | | | |
| Programming and Software Development | | Advanced Database Design and Management (Oracle) (6661/36wks) | Systems Administrator | Business Computer Programming | Info Tech - Database Design And Implementation | |
| | | Advanced Programming (6641/36wks) | | | Info Tech - Computer Programming | |
| | | Computer Information Systems (6612/36wks) | | | Info Tech - Programming Concentration | |
| | | Computer Information Systems (6614/18wks) | | | | |
| | | Database Design and Management (Oracle) (6660/36wks) | | | | |
| | | Programming (6640/36wks) | | | | |



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| Correction Services | Corrections Officer | | | | | | |
| Emergency and fire Management Services | Emergency Medical Technician | Firefighting I, II, III (8705, 8706, 8707) | | Fire Science/Firefighting Emergency Medical Technology/Technician | Fire Fighter - Fire Fighter II (Enhancement Competencies And Tasks) Fire Fighter - Entrance Requirements Fire Fighter - Fire Fighter I | | Fire Protection (replaces study 2330) |
| Security and Protective Services | Security Guard | Public Safety I, II (8700, 8701) | Armed Security Guard Unarmed Security Guard | | Protective Services: Eca Protective Services: Emt | | Security Forces (Combat Arms) |
| Law enforcement Services | Patrol Officer (Police/Sheriff) | | Unarmed Private Investigator | Law Enforcement/Police Science | Part-Time Law Enforcement Officer/Police Services - Program Competencies And Tasks | | |
| Legal Services | Paralegal/Legal Assistant | Legal Systems Administration (6735/36wks) Legal Systems Administration (6736/18wks) Criminal Justice I, II, III (8702, 8703, 8704) | | | Pre-Law - Criminal Law Pre-Law - Family Law Pre-Law - Introduction To Law - Orientation-Human Relations Skills; Communication Skills Pre-Law - The Law Of Property Pre-Law - Civil Law Pre-Law - Constitutional Law | Legal Office Cluster Court Reporter/Captioner Cluster | Paralegal |



| Pathway | CTECS | Virginia | Oklahoma | Missouri | Vermont | Illinois | |
|---|--------------------------|---|--|---|---|---|--------------------------------------|
| Production | Machine Shop (Machinist) | Sheet Metal I, II, III (8663, 8664, 8665) | Machine Tool; Drill Press Operator | Industrial Maintenance | Industrial Mechanics - Electrical/Electronic/Hvac/Plumbing Specialization | Machining Skills Cluster | |
| | Machine Tool Operations | Precision Machining Technology I, II, III | Machine Tool; Lathe Operator | Welding (IE) | Precision Machine Trades | Press Operations Cluster | |
| | Sheet Metal Worker | Industrial Cooperative Training I, II, III, IV - 8901, 8902, 8903, 8904 | Machine Tool; Milling Machine Operator | | Welding/Metal Fabrication | Plastics Molding Cluster | |
| | Welder | | Welding I, II, III 8672, 8673, 8674 | Machine Tool; Power Saw Operator | | Millwork/Cabinetmaking - Business Management And Record Keeping | Metal Stamping Skills Cluster |
| | | | | Machine Tool; Grinding Machine Operator | | Millwork/Cabinetmaking - General Skills | Chemical Process Technical Operators |
| | | | | Machine Tool; CNC Turning Center Operator | | Millwork/Cabinetmaking - Sales, Merchandising, And Marketing | Welding |
| | | | | Machine Tool; CNC Machining Center Operator | | | |
| | | | | Press Operator | | | |
| | | | | Electronic Prepress Operator | | | |
| | | | | Welding; Shielded Metal Arc Welder (SMAW) | | | |
| Welding; Gas Metal Arc Welder (GMAW) | | | | | | | |
| Welding; Flux-Cored Arc Welder | | | | | | | |
| Welding; Gas Tungsten Arc Welder | | | | | | | |
| Welding; Combination Welder | | | | | | | |
| Electronics; Electronic Assembler | | | | | | | |
| Welding; Shielded Metal Arc Welder (SMAW) | | | | | | | |
| Welding; Gas Metal Arc Welder (GMAW) | | | | | | | |
| Welding; Flux-Cored Arc Welder | | | | | | | |
| Welding; Gas Tungsten Arc Welder | | | | | | | |
| Welding; Combination Welder | | | | | | | |



| Pathway | CTECS | Virginia | Oklahoma | Missouri | Vermont | Illinois |
|---|--|---|---|---|--|--|
| Manufacturing Production Process Development | | Advanced Manufacturing Systems Manufacturing Systems Information Technology in Production Systems | | Machine Tool Technology Manufacturing Technology/ Technician Welding (IE) | | |
| Quality Assurance | | | | | | |
| Health, Safety, and Environmental Assurance | | | | | | |
| Maintenance, Installation, and Repair | Biomedical Equipment Technician Industrial Electricity Electromechanical Technician Electronic Service Technician | Industrial Maintenance Technology I, II, III (8575,8576, 8577) | Electrical/Electronic Mechanic Automated Industrial Systems Technician Electrical/Electronic Systems Technician Electronics; Biomedical Electronics Technician Electronics; Computer Systems/Fld. Svc. Technician Electronics; Industrial Electronics Technician Electronics; Instrumentation Technician Electronics; Automotive Electronics Technician Industrial Maintenance Mechanic Electrical/Electronic Mechanic | | Industrial Mechanics - General Skills Industrial Mechanics - Machine Trades Specialization Industrial Mechanics - Power Mechanics Specialization | Industrial Maintenance General Maintenance Cluster |



| Pathway | CTECS | Virginia | Oklahoma | Missouri | Vermont | Air Force |
|---|-----------------------------------|---|--|-------------------------------|---------|---|
| Management and Entrepreneurship | Entrepreneurship | | Entrepreneurship Specialist | Business and Personal Law | | |
| | Small Business Entrepreneur | | Hospitality Hotel/Motel Sales And Marketing: Catering Manager Hospitality Hotel/Motel Sales And Marketing: Sales Manager | Business Management | | |
| Professional Sales and Marketing | | | Salesperson General Merchandise Retailing Specialist | Business Communications | | |
| Buying and Merchandising | | | Assistant Buyer | Business Computer Programming | | Financial Management, Financial Analysis Financial Management and Comptroller Contracting |
| Marketing Communications and Promotion | Fashion Merchandising Occupations | Advanced Fashion Marketing (8145, 8146) Advanced Hotel-Motel Marketing (8162, 8163) Advanced International Marketing (8136) Advanced Marketing (8130, 8131) Advanced Sports, Entertainment, and Recreation Marketing (8177, 8178) | Restaurant Marketing Specialist Advertising Services Specialist Food Marketing Specialist Marketing Assistant Hospitality Hotel/Motel Sales And Marketing: Sales Assistant | | | Printing Management |



| Pathway | CTECS | Virginia | Oklahoma | Missouri | Vermont | Air Force |
|---|-------|---|---|--|---------|--|
| Marketing Communications and Promotion (Cont.) | | Advanced Travel and Tourism Marketing (8167, 8168) Fashion Marketing (8140, 8141) Fundamentals of Marketing (8110) Hotel-Motel Marketing (8160, 8161) International Marketing (8135) Introduction to Fashion Design and Marketing (8148, 8149) Introduction to Marketing (8111) Marketing (8120, 8121) Real Estate Marketing (8191) Sports, Entertainment, and Recreation Marketing (8175, 8176) Advertising Design I, II, III (8570, 8571, 8572) | Hospitality Hotel/Motel Sales And Marketing: Convention Service Manager | | | |
| Marketing Information Management and | | Make It Your Business (8109, 8112, 8113, 8114) Marketing Management (8132) Principles of Business and Marketing (8115, 8116) | | Business Economics | | Personnel (replaces study 2216) Manpower and Quality Management Operations Resources Management (replaces study 2231) Operations, Readiness |
| Distribution and Logistics | | | Inventory Control Clerk | | | Supply Management, Supply Systems Analysis |
| E-Marketing | | Internet Marketing (8125) | | Business Technology Computer Business Applications Digital Communications Electronic-Business International Business | | Readiness (replaces 3E9X1 portion of study 2181) Personnel Systems Management |

| Pathway | CTECS | Virginia | Oklahoma | Missouri | Vermont | Illinois |
|----------------------------|---------------------------------|--|--|---|---|--|
| Engineering and Technology | Biomedical Equipment Technician | Advanced Engineering | Electrical/Electronic Mechanic | Architectural Engineering Technology/Technician | Engineering Technology - Manufacturing Technology | Clinical Laboratory Science/ Biotechnology Cluster |
| | Bio-Technician | Bioengineering | Automated Industrial Systems Technician | Civil Engineering/Civil Technology/Technician | Engineering Technology - Principles Of Technology And Mathematics | |
| | | Biotechnology Foundations | Electrical/Electronic Systems Technician | | Engineering Technology-Cadd | |
| | | Computer Control and Automation | Electronics; Instrumentation Technician | | | |
| | | Engineering Drawing and Design | Electronics; Avionics Technician | | | |
| | | Geospatial Technology | Electronics; Biomedical Electronics Technician | | | |
| | | Introduction to Engineering Inventions and Innovations | | | | |
| | | Principles of Technology I | | | | |
| | | Principles of Technology II | | | | |
| | | Robotic Workcell Technology I, II, III (8557,8558, 8559) | | | | |
| | | Electronics Technology I, II, III (8536, 8537,8538) | | | | |
| Science and Math | | Technology Assessment | | Integrated Academic Skills | | Chemical Process Technical Operators |
| | | Technology Transfer | | | | |



| Pathway | CTECS | Virginia | Oklahoma | Missouri | Vermont | Illinois | Air Force |
|--|---|--|---|---|--|--|---|
| Facility and Mobile Equipment Maintenance | Automatic Transmission and Transaxle - Auto Technician (NATEF) | Automotive Body Repair I, II, III -- Non-Certified | Mechanical Power Transmission Mechanic | Auto Collision Technology | Auto Body Repair-General Skills | Automotive Technician Cluster | Aerospace Ground Equipment (replaces study 2229) |
| | Brakes - Auto Technician (NATEF) | Automotive Body Technology I, II, III Certified | Auto Body; Structural Analysis And Damage Repair Technician | Automotive Technology | Autobody Repair - Workplace Skills | Collision Repair Technician Cluster | Aerospace Maintenance (replaces study 2247) |
| | Brakes - Medium/Heavy Truck (NATEF) | Automotive Maintenance--Non-Certified (8709) | Auto Body; Structural Analysis And Damage Repair Technician | Automotive Technology (Four Main Areas) | Automotive Technology - Brakes | | Aircraft Metals Technology (replaces 2282) |
| | Diesel Engines - Medium/Heavy Truck (NATEF) | Automotive Servicing--Non-Certified I, II, III | Auto Body; Mechanical And Electrical Components Technician | Aviation-Airframe | Automotive Technology - Electrical Systems | | Aircraft Structural Maintenance (replaces 2281) |
| | Drive Train - Medium/Heavy Truck (NATEF) | Automotive Technology I, II, III Certified (8506,8507, 8508) | Auto Body; Plastics And Adhesive Technician | Aviation-Powerplant | Automotive Technology - Engine Performance | | Avionics Sensors Maintenance |
| | Electrical/Electronic Systems - Auto Technician (NATEF) | Aviation Maintenance Technology I, II (8728, 8729) | Auto Body; Painting And Refinishing Technician | Diesel Mechanic | Automotive Technology - Suspension | | Avionics Test Station and Component (F-15) (replaces study 2194) |
| | Electrical/Electronic Systems - Medium/Heavy Truck (NATEF) | Basic Automotive Body Repair--Non-Certified (8675) | Auto Mechanics; Engine Repair Technician | Electrical-Power Transmission Installer - General | Automotive Technology: Diesel/Truck Mechanics & Truck Operation - General Skills | | Avionics Test Station and Component (F-16 / F-117 / A-10 / B-1B / C-17) , (replaces study 2195) |
| | Engine Performance - Auto Technician (NATEF) | Diesel Equipment Technology I, II, III (8613,8614, 8615) | Auto Mechanic Transmission/Transaxle Technician | Heavy Equipment Maintenance and Repairer | Industrial Mechanics - Electrical/Electronic/Hvac/Plumbing Specialization | | Liquid Fuel Systems Maintenance (replaces study 2263) |
| | Engine Repair - Auto Technician (NATEF) | Small Engine Repair (8724) | Manual Drive Train And Axles Technician | Marine Maintenance and Ship Repairer | Industrial Mechanics - General Skills | | Special Purpose Vehicle and Equipment Main |
| | Gasoline Engines - Medium/Heavy Truck (NATEF) | Small Engine Technology I, II, III (8725, 8726, 8727) | Suspension & Steering Technician | Small Engine Technician (IE) | Industrial Mechanics - Machine Trades Specialization | | Structural (replaces study 2197) |
| | Heating and Air Conditioning - Auto Technician (NATEF) | | Brakes Technician | | Industrial Mechanics - Power Mechanics Specialization | | Tactical Aircraft Maintenance (replaces study 2234) |
| | Heating, Ventilation, and Air Conditioning - Medium/Heavy Truck (NATEF) | | Engine Performance Technician | | | | Aerospace Propulsion (replaces study 2205) |
| | Manual Drive Train and Axles - Auto Technician (NATEF) | | Electronics; Avionics Technician | | | | Aircraft Fuel Systems (replaces study 2317) |
| Mechanical and Electrical Components (NATEF) | | Heavy Duty Truck Maintenance; Heavy-Duty Truck Gasoline Engine | | | | Aircraft Hydraulic Systems (replaces study 2286) | |



| Pathway | CTECS | Virginia | Oklahoma | Missouri | Vermont | Illinois | Air Force |
|--|---|---|---|----------|---------|----------|---|
| Facility and Mobile Equipment Maintenance (Cont.) | Non-Structural Analysis and Damage Repair (NATEF) | | Heavy-Duty Truck Maintenance; Diesel Engine Repair Specialist | | | | Helicopter Maintenance (replaces study 2321) |
| | Painting and Refinishing (NATEF) | | Heavy-Duty Truck Maintenance; Heavy-Duty Truck Drive Train | | | | Special Purpose Vehicle and Equipment Maintenance |
| | Plastics and Adhesives (NATEF) | | Heavy Duty Truck Maintenance; Heavy Duty Truck Suspension And Steering Specialist | | | | Special Vehicle Maintenance |
| | Auto Body Repairer | | Heavy-Duty Truck Maintenance; Heavy Duty Truck Brake Specialist | | | | General Purpose Vehicle Maintenance |
| | | | Heavy-Duty Truck Maintenance; Heavy-Duty Truck Electrical/Electronic Systems Specialist | | | | Vehicle Body Maintenance |
| | | | Heavy-Duty Truck Maintenance; Heavy Duty Truck Heating And Air Conditioning Specialist | | | | Maintenance Data Systems Analysis |
| | | | Heavy-Duty Truck Maintenance; Heavy-Duty Truck Preventive Maintenance Inspector | | | | Avionics Guidance and Control Systems |
| | | | Heavy Equipment Operation; Dozer Operator | | | | Flight Engineer (Helicopter Qualified) |
| | | | Heavy Equipment Operation; Scraper Operator | | | | Flight Engineer (Performance Qualified) |
| | | | Heavy Equipment Operation; Loader Operator | | | | |
| | | | Heavy Equipment Operaiton; Grader Operator | | | | |
| | | | Heavy Equipment Operation; Hydraulic Excavator Operator | | | | |
| | | | Heavy Equipment Operation; Backhoe Operator | | | | |
| | | Heavy Equipment Operation; Fork Lift Operator | | | | | |
| | | Gasoline Engine Mechanic | | | | | |



| Pathway | CTECS | Virginia | Oklahoma | Missouri | Vermont | Illinois | Air Force |
|--|------------------------------|--|----------|---|-----------------|------------------------------------|---|
| Transportation Operations | Tractor-Trailer/Truck Driver | Aircraft Pilot Training I, II (8731, 8732) | | Construction Equipment Operator Truck, Bus and Other Commercial Vehicle Operator | Heavy Equipment | Truck Driver, Entry-Level | Air Transportation (replaces study 2227) Aircraft Loadmaster (replaces study 2283) Flight Attendant (replaces study 2341) |
| Logistics Planning and Management Services | | | | | | | Communications - Computer Systems Planning and Implementation (replaces study 2259) Logistics Plans (replaces study 2302) |
| Warehousing and Distribution Center Operations | | | | | | Finishing and Distribution Cluster | |
| Transportation Systems/Infrastructure Planning, Management, and Regulation | Diesel Mechanic | | | | | | Traffic Management (replaces study 2220) Vehicle Operations Ground Radar Systems (replaces 2299) Air Traffic Control (replaces 2309) Aircraft Command, Control, Communications Aircrew Egress Systems (replaces study 2269) Airfield Management (replaces study 2270) |
| Health, Safety, and Environmental Management | | | | | | | Safety (replaces study 2119) |



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|-------------------|--|--|--|--|--|--|--|
| Sales and Service | | | | | | | |
|-------------------|--|--|--|--|--|--|--|