

**Idaho State Board of Education**  
**GOVERNING POLICIES AND PROCEDURES**  
**SECTION: VII. DIVISION OF CAREER TECHNICAL EDUCATION**  
**Subsection: C. Career Technical Educator Certification**

**August 2024**

Occupational Specialist Certificate Endorsements, effective July 1, 2020. Pursuant to Section 33-1201, Idaho Code, every person employed in an elementary or secondary school in the capacity of a teacher must have a certificate issued under the authority of the State Board of Education. Certification requirements are established in IDAPA 08.02.02. Each certificate must have one or more endorsements indicating the occupational area the teacher is qualified to provide instruction in. Endorsement eligibility is determined by the Idaho Division of Career Technical Education. Career technical education endorsements consist of the following:

1. Endorsements A-C

- a. Administrative Services (6-12). Industry experience that indicates applied competence in the majority of the following areas: proficiency in word processing, spreadsheet, database, presentation, and technology media applications; accounting functions; legal and ethical issues that impact business; customer relations; business communication; and business office operations.
- b. Agribusiness (6-12). Industry experience that indicates applied competence in the majority of the following areas: plant and animal science; agricultural economic principles; business planning and entrepreneurship; agriculture business financial concepts and recordkeeping systems; risk management in agriculture; laws related to agriculture and landowners; marketing and sales plans; and sales.
- c. Agriculture Food Science and Processing Technologies (6-12). Industry experience that indicates applied competence in the majority of the following areas: properties of food; principles of processing; post-processing operations; safety practices; and equipment and tools used in food processing.
- d. Agriculture Leadership and Communications (6-12). Industry experience that indicates applied competence in the majority of the following areas: applied communications and leadership through agricultural education; supervised agricultural experience; career opportunities in agricultural science, communications, and leadership; agriculture's impact on society; agricultural science principles; agricultural communication principles; and agricultural leadership principles.
- e. Agriculture Mechanics and Power Systems (6-12). Industry experience that indicates applied competence in the majority of the following areas: safety practices; tools and hardware; metal technology; power systems; electricity; mathematical applications; insulation; and careers in agricultural mechanics and powers systems.
- f. Aircraft Maintenance (6-12). Industry experience that indicates applied competence in the majority of the following areas: aviation safety regulations, aviation industry trends; aviation career paths, skills, and qualifications; knowledge of aircraft systems including electrical, hydraulic, pneumatic, avionics, and propulsion systems, and other components; aircraft maintenance principles and

- practices; maintenance tools and equipment; experience in inspecting, troubleshooting, and diagnosing issues with aircrafts; composite repair techniques, and preventative and structural maintenance.
- g. Animal Science (6-12). Industry experience that indicates applied competence in the majority of the following areas: animal agricultural industries; nutritional requirements for livestock; livestock reproductive systems; principles of evaluation for animal selection; animal welfare, handling, and quality assurance; medication and care; disease transmission and care; harvesting and processing of animal products; and animal science risk management.
  - h. Apparel/Textiles (6-12). Industry experience that indicates applied competence in the majority of the following areas: fashion trends; design sketches; color and fabric selection; production of clothing and accessories; and enhancement of function and safety.
  - i. Applied Accounting (6-12). Industry experience that indicates applied competence in the majority of the following areas: accounting functions; accounting ethics; software application packages; financial statements; asset protection and internal controls; inventory records; long-term assets; and payroll procedures.
  - j. Automated Manufacturing (6-12). Industry experience that indicates applied competence in the majority of the following areas: lab organization and safety practices, blueprint reading, measuring, computer-aided design (CAD); computer-aided manufacturing (CAM), computer numeric control (CNC), fundamental power system principles, manufacturing processes, electronic and instrumentation principles, machining, robotics and materials-handling systems, and additive (3D) printing.
  - k. Automotive Collision Repair (6-12). Industry experience that indicates applied competence in the majority of the following areas: auto body collision-repair practices; tools; trade skills in refinishing, welding, and painting.
  - l. Automotive Maintenance and Light Repair (6-12). Industry experience that indicates applied competence in the majority of the following areas: service, maintenance, and repair practices for a wide variety of vehicles; and diagnosing, adjusting, repairing, and replacing individual vehicle components and systems.
  - m. Business Digital Communications (6-12). Industry experience that indicates applied competence in the majority of the following areas: elements and principles of design and visual communications; professional communication skills; editing and proofreading; copyright and intellectual property law; portfolio development; content development strategy; branding and corporate identity; graphic communication production; video editing; web page development; web page design and layout; and web-related planning and organizational standards.
  - n. Business Management (6-12). Industry experience that indicates applied competence in the majority of the following areas: planning and organizing; directing, controlling and evaluating goals and accomplishments; financial decision-making; competitive analysis and marketing strategies; human resource management; customer relations; technology; project management; operations and inventory; and social responsibility.
  - o. Cabinetmaking and Bench Carpentry (6-12). Industry experience that indicates applied competence in the majority of the following areas: cabinetmaking and

- millwork production; cutting, refinishing, installing, and shaping of various materials; knowledge of industry standards and construction applications; hardware; and blueprint reading.
- p. Certified Welding (6-12). Industry experience that indicates applied competence in the majority of the following areas: fundamental print reading; measurement and layout/fit-up techniques; properties of metals; shielded metal arc welding (SMAW); gas metal arc welding (GMAW and GMAW-S); flux cored arc welding (FCAW-G); gas tungsten arc welding (GTAW); thermal cutting processes; welding codes; inspection and testing principles; and fabrication techniques.
  - q. Child Development and Services (6-12). Industry experience that indicates applied competence in the majority of the following areas: early childhood-education career paths and opportunities for employment; ethical conduct; advocacy for children; child/human development and learning; family and community relations; child observation, documentation, and assessment; positive relationships and supportive interaction; and approaches, strategies, and tools for early childhood education.
  - r. Commercial Photography (6-12). Industry experience that indicates applied competence in the majority of the following areas: ethics in photography, elements and principles of design composition, cameras and lenses, exposure settings, light sources, digital workflow, presentation techniques and portfolios, and production using industry standard software.
  - s. Computer Support (6-12). Industry experience that indicates applied competence in the majority of the following areas: basic network technologies, laptop support, PC support, printer support, operating systems, security, mobile device support, troubleshooting techniques, and trends in the industry.
  - t. Construction Trades Technology (6-12). Industry experience that indicates applied competence in the majority of the following areas: comprehensive knowledge of structural systems and processes, classical and contemporary construction elements, knowledge of industry standards, knowledge of architecture, basic cabinetry and millwork, and blueprint reading.
  - u. Cosmetology (6-12). Industry experience that indicates applied competence in the majority of the following areas: hair design; skincare; nail care; industry guidelines and procedures; entrepreneurship; and communications. Instructor must hold a current and valid Idaho license or certificate as a cosmetologist.
  - v. Culinary Arts (6-12). Industry experience that indicates applied competence in the majority of the following areas: experience as a chef in a full-service restaurant; business operations experience in the culinary/catering industry; communication and organization skills with customers and vendors; industry-recognized food safety and sanitation certification; knowledge of proper food handling, ingredients, food quality and control practices; culinary tools and equipment; cooking methods; meal preparation; menu planning principles and industry trends and career options.
  - w. Cybersecurity (6-12). Industry experience that indicates applied competence in the majority of the following areas: fundamentals of cybersecurity, cyber operations, offensive security, defense security, forensics, incident response, networking, risk management, cyber systems thinking, and advanced topics in cybersecurity

## 2. Endorsements D-N

- a. Dental Assisting (6-12). Industry experience that indicates applied competence in the majority of the following areas: dental professions pathways; ethics in dental practice; nutrition as related to oral health; infection control; occupational safety; dental-related anatomy and pathology; dental anesthesia; dental assisting skills; dental materials; and dental radiology. Instructor must hold a current and valid Idaho license or certificate as a dental assistant, dental hygienist, or dentist.
- b. Digital Media Production (6-12). Industry experience that indicates applied competence in the majority of the following areas: graphic design industry structure; elements and principles of design composition; visual communication; industry-standard software production; ethics and graphic design; digital portfolios; mathematical skills as related to design; communication skills; editing and proofreading; video editing; digital media and production; dissemination techniques and methods; broadcasting equipment, camera, and lens operations; light sources; presentation techniques; public speaking; and writing skills.
- c. Drafting and Design (6-12). Industry experience that indicates applied competence in the majority of the following areas: technical drawings, scale drawings, architectural drafting, mechanical drafting, orthographic projection, two- and three-dimensional drawings, manual drafting, and computer aided design.
- d. Ecology and Natural Resource Management (6-12). Industry experience that indicates applied competence in the majority of the following areas: ecological concepts and scientific principles related to natural resource systems; forest types; forest management components and practices; fire ecology and management; importance and application of GPS/GIS in natural resource management; fish and wildlife ecology; and mineral and energy resources management.
- e. Electrical Technology (6-12). Industry experience that indicates applied competence in the majority of the following areas: digital and solid-state circuits, DC principles, AC concepts, soldering techniques, circuits, and electrician-associated electronic components and tools. Instructor must hold a current and valid Idaho license or certificate as an electrician.
- f. Electronics Technology (6-12). Industry experience that indicates applied competence in the majority of the following areas: digital and solid-state circuits; DC principles; AC principles; soldering techniques; circuits; digital electronics; electronic circuits; electronic devices; and electronic digital circuitry simulations and associated electronic components and tools.
- g. Emergency Medical Technician (EMT) (6-12). Industry experience that indicates applied competence in the majority of the following areas: fundamental knowledge of the emergency management services (EMS) system; medical and legal/ethical issues in the provision of emergency care; EMS systems workforce safety and wellness; documentation; EMS system communication; therapeutic communication; anatomy and physiology; medical terminology; pathophysiology; and lifespan development (per the EMR and EMT sections of the Idaho EMS Education Standards located on the Idaho Department of Health and Welfare website). Instructor must have passed the National Registry exam. Instructor must

hold a current and valid Idaho EMS license or certificate and be certified as an EMT instructor through Idaho EMS.

- h. Firefighting (6-12). Industry experience that indicates applied competence in the majority of the following areas: knowledge of local, state, and federal laws and regulations; firefighting procedures; firefighting tactics; firefighting equipment and vehicles; EMT basic training; first aid and CPR training; and reporting requirements under Idaho criminal code. Instructor must hold a current and valid Idaho license or certificate as an EMT and firefighter.
- i. Graphic Design (6-12). Industry experience that indicates applied competence in the majority of the following areas: the graphic design industry; elements and principles of design and visual communication; production using industry standard software; branding and corporate identity; ethical and legal issues related to graphic design; portfolio development and evaluation; mathematics for visual communications; communication; editing and proofreading; graphic design in digital media; and applied art.
- j. HVAC Technology (6-12). Industry experience that indicates applied competence in technical subjects and skills related to the HVAC trade as approved by the Idaho HVAC Board and the Idaho State Board for Career Technical Education: installing, altering, repairing, and maintaining HVAC systems and equipment including air conditioners, venting or gas supply systems, ductwork, and boilers. Instructor must hold a current and valid Idaho license or certificate as an HVAC Technician.
- k. Heavy Duty Truck and Equipment (6-12). Industry experience that indicates applied competence in the majority of the following areas: knowledge of diesel engine service; preliminary inspection; identification and repair of vehicle components; preventative maintenance; and heavy equipment applications.
- l. Hospitality Management (6-12). Industry experience that indicates applied competence in the majority of the following areas: business structures; economics; human resources; sales and marketing; finance and budgeting; safety and security; legal and ethical considerations; event planning and management; teamwork; communication skills; lodging operations; and food and beverage operations.
- m. Hospitality Services (6-12). Industry experience that indicates applied competence in the majority of the following areas: careers in the hospitality and tourism industry; customer service; event planning implementation; procedures applied to safety, security, and environmental issues; practices and skills involved in lodging occupations and travel-related services; and facilities management.
- n. Industrial Mechanics (6-12). Industry experience that indicates applied competence in the majority of the following areas: industrial mechanics knowledge; shop skills; diagnostic and repair techniques; welding; hydraulic; electronic systems; and maintenance and preventative maintenance.
- o. Journalism (6-12). Industry experience that indicates applied competence in the majority of the following areas: legal and ethical issues related to journalism and photojournalism, principles and techniques of media design, design formats, journalistic writing, social media and digital citizenship, and media leadership.
- p. Law Enforcement (6-12). Industry experience that indicates applied competence in the majority of the following areas: knowledge of local, state, and federal laws

and regulations; defensive strategies; investigative strategies; search principles and strategies; tactical procedures; vehicle operations; knowledge of weapons and use where appropriate; first aid and CPR training; social and psychological sciences; and identification systems.

- q. Marketing (6-12). Industry experience that indicates applied competence in the majority of the following areas: economic systems; international marketing and trade; ethics; external factors to business; product/service management; pricing; distribution channels; advertising; sales promotion; public relations; retail management; market research and characteristics; digital marketing; and financing and financial analysis.
- r. Medical Assisting (6-12). Industry experience that indicates applied competence in the majority of the following areas: human anatomy, physiology and pathology, medical terminology, pharmacology, clinical and diagnostic procedures, medication administration, patient relations, medical law and ethics, scheduling, records management, and health insurance. Instructor must hold a current and valid medical assistant certification as evidenced in the national registry.
- s. Networking Support (6-12). Industry experience that indicates applied competence in the majority of the following areas: PC hardware configuration, fundamental networking technologies, operating systems, basic networking, basic security, and basic network configurations.
- t. Nursing Assistant (6-12). Industry experience that indicates applied competence in the majority of the following areas: scope of practice; ethics and legal issues; communication and interpersonal relationships; documentation; care practices; infection prevention; human anatomy and physiology; medical terminology; personal care procedures; physiological measurements; nutritional requirements and techniques; procedures and processes related to elimination; quality patient environment; patient mobility; admission, transfer, and discharge procedures; care of residents with complex needs; and safety and emergency. Instructor must hold a current and valid Idaho registered nursing license and be approved as a certified CNA primary instructor through Idaho Department of Health and Welfare.

### 3. Endorsements O-Z

- a. Ornamental Horticulture (6-12). Industry experience that indicates applied competence in the majority of the following areas: safety practices; plant anatomy; plant physiology; plants identification skills; growing media; plant nutrition; integrated pest management; plant propagation; ornamental horticulture crops; business concepts; plant technologies; ornamental design standards; and career opportunities in ornamental horticulture.
- b. Pharmacy Technician (6-12). Industry experience that indicates applied competence in the majority of the following areas: patient profile establishment and maintenance; insurance claim preparation; third-party insurance provider correspondence; prescription and over-the-counter medications stocking and inventorying; equipment and supplies maintenance and cleaning; and cash register operation. Instructor must be a pharmacist, registered nurse, or pharmacy technician holding a current and valid Idaho license or certification.

- c. Plant and Soil (6-12). Industry experience that indicates applied competence in the majority of the following areas: plant anatomy and identification; plant processes, growth, and development; soil and water; plant nutrition; integrated pest management; careers and technology; and safety.
- d. Plumbing Technology (6-12). Industry experience that indicates applied competence in technical subjects and skills related to the plumbing trade as approved by the Idaho Plumbing Board and the Idaho Board for Career Technical Education: repairing, installing, altering, and maintaining plumbing systems and fixtures including interconnecting system pipes and traps, water drainage, water supply systems, and liquid waste/sewer facilities. Instructor must hold a current and valid Idaho license or certificate as a plumber.
- e. Powersports and Outdoor Power Equipment (6-12). Industry experience that indicates applied competence in the majority of the following areas: workplace safety; tools and equipment; precision measuring instruments and fasteners; unit, equipment, and component identification; engine repair, lubrication, and cooling; electrical/electronic systems; fuel, ignition, and engine management systems; drives, clutches, axles, and transmission systems; wheels, tires and breaks systems; chassis, suspension, and steering systems; and hydraulic systems.
- f. Pre-Engineering Technology (6-12). Industry experience that indicates applied competence in the majority of the following areas: lab safety; impacts of engineering; ethics of engineering; design process; documentation; technical drawing; 3D modeling; material science; power systems; basic energy principles; statistics; and kinematic principles.
- g. Precision Machining (6-12). Industry experience applied the majority of the following areas: precision machining practices; tools used to shape parts for machines; industrial mechanics; shop skills; safety in practice; blueprint reading; and diagnostic and repair techniques.
- h. Programming and Software Development (6-12). Industry experience that indicates applied competence in the majority of the following areas: basic programming principles; problem solving; programming logic; validation; repetition; programming classes; exceptions, events, and functionality; arrays and structure; design principles; system analysis; and implementation and support.
- i. Rehabilitation Services (6-12). Industry experience that indicates applied competence in the majority of the following areas: ethical, legal, and professional responsibilities; medical terminology; anatomy and physiology; roles and responsibilities of the rehabilitation team; patient care skills; therapeutic interventions; and common pathologies. Instructor must be a health professional holding a current and valid Idaho license or certificate in his/her field of study.
- j. Small Engine Repair (6-12). Industry experience that indicates applied competence in the majority of the following areas: small gasoline engine construction and performance; industry-related resources; equipment used to diagnose and troubleshoot issues; repair; entrepreneurship; and customer service.
- k. Web Design and Development (6-12). Industry experience that indicates applied competence in the majority of the following areas: web page development, web page design and layout, integration of web pages, web planning and organizational standards, and web marketing.

- I. Work-Based Learning Coordinator (6-12). Educators assigned to coordinate approved work-based experiences must hold this endorsement. Applicants must hold an occupational endorsement on the Degree Based Career Technical Certificate or Occupational Specialist Certificate, and complete coursework in coordination of work-based learning programs.

4. Degree Based Career Technical Certificate Endorsements:

- a. Agricultural Science and Technology (6-12). Thirty (30) semester credit hours to include coursework in methods of teaching agricultural science and technology, agriculture education, agriculture mechanics, agriculture business management, soil science, animal science, plant science, and horticulture.
- b. Business Technology Education (6-12). Twenty (20) semester credit hours to include coursework in methods of teaching business technology education, accounting, computer and technical applications in business, economics, business communication/writing, finance, marketing, business management, and office procedures. Additional coursework may include entrepreneurship or business law.
- c. Computer Science (6-12). Successful attainment of an Institutional Recommendation for the Computer Science (6-12) endorsement on a Standard Instructional Certificate, completion of coursework satisfying IDAPA 08.02.02.015.04.a.
- d. Cybersecurity Technology Education (6-12). Twenty (20) semester credit hours to include coursework or entry-level cybersecurity certifications in methods of teaching cybersecurity, fundamentals of cybersecurity, cyberoperations, offensive security, defense security, forensics, incident response, networking, risk management, cyber-systems thinking, and advanced topics in cybersecurity
- e. Engineering (6-12). Successful attainment of an Institutional Recommendation for the Engineering (6-12) endorsement on a Standard Instructional Certificate, completion of coursework satisfying IDAPA 08.02.02.015.04.a.
- f. Family and Consumer Sciences (6-12). Thirty (30) semester credit hours to include coursework in methods of teaching family and consumer sciences; foundations of family and consumer sciences; consumer economics and family resources; child/human development; early childhood laboratory or practicum teaching experience; family and interpersonal relationships; food safety; the science of food preparation or culinary arts; lifespan nutrition and wellness; living environments and interior design; and apparel and textiles. Additional coursework may include hospitality and tourism, and entrepreneurship.
- g. Marketing Technology Education (6-12). Twenty (20) semester credit hours to include coursework in methods of teaching marketing technology education, marketing, business management, economics, merchandising/retailing, finance, and accounting. Additional coursework may include entrepreneurship.
- h. Technology Education (6-12). Twenty (20) semester credit hours to include coursework in methods of teaching technology education; communication technology; computer applications; construction technology; electronics technology; manufacturing technology; power, energy, and transportation; principles of engineering design; and other relevant emerging technologies.

5. The following career technical education endorsements awarded prior to July 1, 2020 shall be grandfathered and shall not be awarded after July 1, 2020:

- a. Agricultural Business Management (6-12)
  - b. Agricultural Power Machinery (6-12)
  - c. Agricultural Production (6-12)
  - d. Animal Health and Veterinary Science (6-12)
  - e. Aquaculture (6-12)
  - f. Business Management/Finance (6-12)
  - g. Child Development Care and Guidance (6-12)
  - h. Culinary Arts (6-12)
  - i. Dietitian (6-12)
  - j. Farm and Ranch Management (6-12)
  - k. Fashion and Interiors (6-12)
  - l. Food Service (6-12)
  - m. Forestry (6-12)
  - n. Horticulture (6-12)
  - o. Information/Communication Technology (6-12)
  - p. Microcomputer Applications (6-12)
  - q. Natural Resource Management (6-12)
  - r. Networking and Computer Support (6-12)
  - s. Orientation to Health Professions (6-12)
  - t. Programming and Web Design (6-12)
6. The review and approval of professional development courses subject to the provisions of Section 33-1614, Idaho Code, will be evaluated and approved by the Division.