

**Ceres Unified School District
Career Technical Education Programs Summary**

These programs provide students workforce readiness skills that are required by local and regional industry partners. Students acquire skills that qualify them for living-wage jobs and entry level employment opportunities in high demand fields. As part of the District's CTE Master Plan, four CTE Sectors have been approved with specific instructional pathways defined under each sector.

| Industry Sector | Career Pathway(s) | Description(s) |
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| Agriculture and Natural Resources | Agricultural Mechanics Pathway | Prepares students for the agricultural industry, including: operation and maintenance of Ag equipment; wood working; electrical; plumbing; cold metal work; concrete; welding; metal fabrication; small engines; and Ag power equipment. |
| | Animal Science Pathway | Students study large and small animals; students explore animal habitats, behavior, genetics to create an ecologically sustainable animal production system; students study animal anatomy, physiology, reproduction, technology, management and processing of animal products. |
| | Ornamental Horticulture Floriculture Pathway | Prepares students for careers in the nursery, landscaping and floral industries. Topics include: plant identification and physiology; soil science; plant production; floriculture; landscape design; installation and maintenance. |
| | Agri-Science Pathway | Provides learning experiences in food science and safety, allowing students to apply scientific knowledge and processes to practices used in the development and preservation of food products. Units of instruction include: principles of food preservation, food processing, biochemistry of foods, and food selection and consumer health. Careers to be examined include meat inspector, quality control technician, food processor, and sanitation supervisor. Participation in FFA student organization activities is an integral course component for leadership development, career exploration and reinforcement of academic concepts. |
| | Plant & Soil Science Pathway | Provides knowledge of the propagation of plants for food and fiber. Topics may include: plant growth and health, irrigation, pest and weed control, food and fiber processing, and farm operations. As well as, knowledge and skills needed to produce all types of crops and may emphasize a particular area of the agricultural industry. Advanced skills continue to focus on more specific areas such as soil science, viticulture, vegetables, grains specialty crops, irrigation, weed and pest control. Additionally, the marketing, sales, economics, cash flow and management of crops and related enterprises will be addressed. |
| Manufacturing and Product Development | Machine and Forming Technology Pathway | Provides students with concepts and experiences required for career readiness and pursuing further education in Machining and Forming Technologies career pathway. 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. Topics include manufacturing, AC/DC electrical, engineering, robotics and much more. |
| | Welding Technology Pathway | Provides students with an understanding of manufacturing and agriculture processes and systems that utilize welding, specific topics include: interpretation and layout of welded and assembled part prints; mechanical bonding and joining; cohesive and adhesive bonding; and mechanical fastening. |

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| Information & Communication Technologies | Software & Systems Development | Prepares students for careers that involve creating, designing, and producing multimedia products and services. Topics include: webpage design and management; print media; publication media; and technical writing and communication. Students prepare for careers in design, development and implementation of computer systems and software. Topics include: computer programming; software development; systems management; and learning to create video gaming, etc. |
| Arts & Media Entertainment | Design, Visual, Media Arts Pathway | Students will examine the specific uses of film and video technology in various creative industry applications. Students will demonstrate advanced knowledge and skills in pre-production, production, and post-production practices in an educational and work based environment. Students will create film, video and sound projects that demonstrate comprehensive knowledge of professional film, video and sound production. |
| Engineering & Architecture | Engineering & Design Pathway | 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. |
| Public Service | Protective Services (Criminal Justice) | Students prepare for entry level employment through classroom instruction, hands-on learning and community experience. This pathway primarily addresses public order, general safety, and the well being of the community. |

Ceres Unified School District does not discriminate, segregate, or exclude students on the basis of race, color, national origin, gender, disability, sexual orientation, ethnicity, ancestry, religion, color, parent, family or marital status.