



## **Career and Technical Education**

# **Course Catalog**

**2025-2026**

## Bell Schedule

<b>1st</b>	<b>7:25-8:17</b>
<b>2nd</b>	<b>8:22-9:38</b>
<b>3rd</b>	<b>9:43-10:35</b>
<b>4th</b>	<b>10:40-11:32</b>
<b>5th</b>	<b>11:37-1:11</b>
<b>A</b>	<b>11:37-12:07</b>
<b>B</b>	<b>12:09-12:39</b>
<b>C</b>	<b>12:41-1:11</b>
<b>6th</b>	<b>1:16-2:08</b>
<b>7th</b>	<b>2:13-3:05</b>

# Agriculture, Food & Natural Resources

## **Principles of Agriculture, Food, and Natural Resources**

*Program of Study:* Agriculture Mechanics, Animal Science, Plant Science

*Credits:* 1 | *Prerequisites:* None

Provides a broad overview of the agricultural industry and its global significance. Topics include career exploration, agricultural leadership (FFA), research methods, food and fiber production, animal and plant science, environmental science, and basic mechanical skills. Students also develop personal, professional, and communication skills.

## **Agricultural Mechanics and Metal Technologies**

*Program of Study:* Agriculture Mechanics

*Credits:* 1 | *Prerequisites:* Principles of Agriculture, Food, and Natural Resources

Covers safety procedures and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete work, and metal fabrication. Students gain technical knowledge in agricultural power and structural systems, preparing for industry certifications and technical career pathways.

## **Agricultural Structures**

*Program of Study:* Agriculture Mechanics

*Credits:* 1 | *Prerequisites:* Principles of Agriculture, Food, and Natural Resources; Agricultural Mechanics and Metal Technologies

Focuses on welding proficiency, including cutting torch and MIG welding in flat, horizontal, and vertical positions. Students also develop advanced skills in tool operation, electrical wiring, plumbing, carpentry, and metalworking techniques.

## **Floral Design**

*Program of Study:* Plant Science

*Credits:* 1 | *Prerequisites:* Principles of Agriculture, Food, and Natural Resources

Introduces the principles and techniques of floral design, including arrangement styles and floral enterprise management.

## **Advanced Floral Design**

*Program of Study:* Plant Science

*Credits:* 1 | *Prerequisites:* Principles of Agriculture, Food, and Natural Resources; Floral Design

Expands upon Floral Design I, covering advanced arrangements, specialty designs, and event-specific floral planning.

## **Advanced Plant and Soil Science**

*Program of Study:* Plant Science

*Credits:* 1 | *Prerequisites:* Principles of Agriculture, Food, and Natural Resources

Explores advanced concepts in plant and soil science, including the role of plants and soils in environmental systems and scientific research. Students gain technical skills for careers in agriculture and related sciences.

## **Veterinary Medical Applications**

*Program of Study:* Animal Science

*Credits:* 1 | *Prerequisites:* Principles of Agriculture, Food, and Natural Resources

Prepares students for careers in animal science by developing academic and technical skills related to animal systems and workplace practices. Students participate in various veterinary care settings.

## **Advanced Animal Science**

*Program of Study:* Animal Science

*Credits:* 1 | *Prerequisites:* Principles of Agriculture, Food, and Natural Resources

Examines the integration of scientific and technological aspects of livestock production through field and laboratory experiences.

## **Practicum in AFNR**

*Program of Study:* Entrepreneurship

*Credits:* 2 | *Prerequisites:* Principles of AFNR

Provides field-based experience in community and workforce settings. Students develop organizational and leadership skills while exploring career opportunities in Agriculture.

# **Construction Management**

## **Principles of Construction**

*Program of Study:* Construction Management, HVAC

*Credits:* 1 | *Prerequisites:* None

Provides an overview of architecture, interior design, construction science, and construction technology. Students receive safety training, explore career opportunities, and develop foundational skills in hand and power tools, basic rigging, reading technical drawings, problem-solving, critical thinking, and workplace ethics.

## **Construction Management**

*Program of Study:* Construction Management

*Credits:* 2 | *Prerequisites:* Principles of Construction

Focuses on skills and knowledge needed for carpentry, building maintenance supervision, and postsecondary studies in architecture, construction science, drafting, or engineering. Emphasizes design techniques and project management in architectural and engineering contexts.

## **Advanced Construction Management**

*Program of Study:* Construction Management

*Credits:* 2 | *Prerequisites:* Principles of Construction; Construction Management

Builds on Construction Management, expanding knowledge of project design, technical tools, and management skills for architectural and engineering projects.

# **HVAC**

## **HVAC I**

*Program of Study:* HVAC

*Credits:* 2 | *Prerequisites:* Principles of Construction

Introduces students to HVAC systems, safety procedures, tool use, basic principles of compressors, condensers, evaporators, and system controls. Students gain EPA 608 Certification and benefit from industry presentations on current trends and workforce expectations.

## **HVAC II**

*Program of Study:* HVAC

*Credits:* 2 | *Prerequisites:* Principles of Construction; HVAC I

Continues skill development in residential and commercial HVAC systems with hands-on experience. Students gain OSHA and NATE ICE certification and are prepared for HVAC industry certification exams.

## **Arts, Audio/Video Technology & Communications**

### **Graphic Design**

*Program of Study:* Communication, Photography, Animation

*Credits:* 1 | *Prerequisites:* None

Develops fundamental visual art and design skills for careers in the Arts, Audio/Video Technology, and Communications cluster. Students gain an understanding of industry practices, design principles, and creative problem solving.

### **Commercial Photography I**

*Program of Study:* Communication, Photography

*Credits:* 1 | *Prerequisites:* Graphic Design

Teaches technical and creative photography skills including design, production, and publishing of multimedia content. Focuses on creating quality photographs and understanding commercial photography industry standards.

### **Commercial Photography II**

*Program of Study:* Communication, Photography

*Credits:* 1 | *Prerequisites:* Commercial Photography I

Builds advanced technical and professional skills in photography, including production, promotion, and presentation of professional-quality images for the commercial market.

### **Professional Communications**

*Program of Study:* Digital Communication

*Credits:* 0.5 | *Prerequisites:* None

Blends written, oral, and digital communication skills within career-focused contexts. Students develop professional communication, software applications, computer graphics, and research skills.

### **Audio/Video Production I**

*Program of Study:* Audio/Video Production

*Credits:* 1 | *Prerequisites:* Professional Communications

Introduces careers in the Arts, Audio/Video Technology, and Communications cluster. Students explore industry opportunities, technical skills, and career requirements while building foundational media production knowledge.

### **Audio/Video Production II**

*Program of Study:* Audio/Video Production

*Credits:* 1 | *Prerequisites:* Professional Communications; Audio/Video Production I

Advances technical skills in media production, including pre-production, production, and post-production. Students gain experience with both audio and video formats and explore industry expectations.

### **Digital Art and Animation**

*Program of Study:* Graphic Design and Interactive Media (Commercial Photography)

*Credits:* 1 | *Prerequisites:* None

Introduces students to the history, techniques, and technical skills necessary for careers in animation, multimedia design, and related industries.

## **Entrepreneurship**

### **Business Information Management**

*Program of Study:* Entrepreneurship

*Credits:* 1 | *Prerequisites:* None

Students develop technical and interpersonal skills to succeed in the workplace. Includes creating documents, spreadsheets, databases, and presentations using current software, while integrating emerging technologies.

### **Entrepreneurship I**

*Program of Study:* Entrepreneurship

*Credits:* 1 | *Prerequisites:* None

Introduces concepts and skills in marketing, financing, information management, product planning, promotion, and customer relations. Students integrate academic, technical, and interpersonal skills to make informed business decisions.

### **Entrepreneurship II**

*Program of Study:* Entrepreneurship

*Credits:* 1 | *Prerequisites:* Entrepreneurship I

Expands on introductory concepts, focusing on launching and scaling a business, including business modeling, funding, team building, and legal considerations.

### **Practicum in Entrepreneurship**

*Program of Study:* Entrepreneurship

*Credits:* 2 | *Prerequisites:* Business Information Management; Entrepreneurship

Provides field-based experience in community and workforce settings. Students develop organizational and leadership skills while exploring career opportunities in entrepreneurship.

### **Money Matters**

*Program of Study:* Accounting

*Credits:* 1 | *Prerequisites:* None

Explores personal finance and global economic principles. Students learn investment strategies, tax planning, asset allocation, risk management, retirement planning, and goal-setting to achieve long-term financial objectives.

## **Education & Training**

### **Principles of Education**

*Program of Study:* Education and Training

*Credits:* 1 | *Prerequisites:* Child Development; Human Growth and Development

Introduces foundational knowledge of education, including teaching roles, lesson planning, classroom management, and historical, social, and philosophical perspectives on education.

### **Practicum in Education**

*Program of Study:* Education and Training

*Credits:* 2 | *Prerequisites:* Principles of Education

Provides supervised field experience in a school setting. Students observe, assist, and teach under guidance, bridging theory and practice for aspiring educators.

### **Child Development**

*Program of Study:* Early Learning; Family and Consumer Services

*Credits:* 2 | *Prerequisites:* None

Covers child growth and development from prenatal through school age. Students gain hands-on experience and explore careers in childcare and education.

### **Human Growth and Development**

*Program of Study:* Family and Consumer Services; Education and Training

*Credits:* 1 | *Prerequisites:* Child Development

Examines physical, cognitive, social, and emotional development across the lifespan, emphasizing milestones, theoretical perspectives, and family and societal contexts.

## **Health Science**

### **Principles of Health Science/Health Science Theory**

*Program of Study:* Nursing; Medical Therapy, EMT

*Credits:* 2 | *Prerequisites:* None

Introduces the healthcare industry, including career pathways, history of healthcare, ethics, human needs, cultural diversity, and infection control. Prepares students for clinical and work-based experiences.

### **Nursing (Collin College)**

*Program of Study:* Nursing

*Credits:* 2 | *Prerequisites:* Principles of Health Science

Focuses on healthcare knowledge and skills essential for modern settings. Covers history, facilities, ethics, legal responsibilities, and infection control, preparing students for clinical experiences and postsecondary nursing pathways.

### **Anatomy and Physiology**

*Program of Study:* Nursing; Emergency Services

*Credits:* 1 | *Prerequisites:* Principles of Health Science; Health Science Theory

Provides laboratory and field investigations in human anatomy and physiology. Students study structure, function, and interaction of body systems while applying scientific methods and critical thinking.

### **Rehab Aide / Medical Therapy**

*Program of Study:* Rehab Aide / Medical Therapy

*Credits:* 2 | *Prerequisites:* Health Science; Health Science Theory

Focuses on biology and medical skills needed for careers in respiratory, occupational, physical, or speech therapy. Students gain knowledge and practical skills for healthcare support roles.

### **Emergency Medical Technician (EMT) — Collin College**

*Program of Study:* Emergency Services

*Credits:* 2 | *Prerequisites:* Principles of Health Science; Health Science Theory

Provides foundational knowledge and skills for EMT careers, including emergency care, life support, ambulance service, communications, and recordkeeping.

# Culinary Arts

## **Introduction to Culinary Arts**

*Program of Study:* Culinary Arts

*Credits:* 1 | *Prerequisites:* None

Covers fundamentals of cooking and baking, management principles, and production skills. Introduces students to culinary techniques and kitchen operations.

## **Culinary Arts I**

*Program of Study:* Culinary Arts

*Credits:* 2 | *Prerequisites:* Introduction to Culinary Arts

Focuses on culinary and baking skills, management, and production. Students may pursue national sanitation and Texas culinary specialist certifications, and participate in career and technical student organizations.

## **Culinary Arts II**

*Program of Study:* Culinary Arts

*Credits:* 2 | *Prerequisites:* Culinary Arts I

Students manage Café Fresh operations, including menu planning, ingredient ordering, meal preparation, and service. Provides hands-on experience for careers in culinary arts.

# Human Services

## **Introduction to Cosmetology**

*Program of Study:* Cosmetology

*Credits:* 1 | *Prerequisites:* None

Explores cosmetology careers and foundational technical skills. Students begin accumulating hours toward state licensure requirements.

## **Cosmetology I**

*Program of Study:* Cosmetology

*Credits:* 2 | *Prerequisites:* Introduction to Cosmetology

Covers hair, skin, and nail treatments, safety, sanitation, customer service, and communication. Students complete 500 hours of laboratory instruction and explore postsecondary opportunities.

## **Cosmetology II**

*Program of Study:* Cosmetology

*Credits:* 3 | *Prerequisites:* Introduction to Cosmetology; Cosmetology I

Refines Cosmetology I skills with practical experience on clients. Students complete 1,000 hours of laboratory work over two years and prepare for state licensure exams.

## **Family and Consumer Services**

*Program of Study:* Family and Consumer Services

*Credits:* 2 | *Prerequisites:* Principles of Human Services

Involves students in community-based service-learning experiences. Focuses on organizational and leadership skills, while providing services to families and the community.

## **Practicum in Human Services**

*Program of Study:* Family and Consumer Services

*Credits: 2 | Prerequisites: Principles of Human Services*

Provides background knowledge and occupation-specific training in consumer services, early childhood development, counseling, mental health, and family/community services.

## **Information Technology**

### **Principles of Information Technology**

*Program of Study: Web Development; CPU Technology*

*Credits: 1 | Prerequisites: None*

Introduces computer maintenance, hardware principles, and repair of computer systems. Students apply knowledge in various settings and problem-solving scenarios.

### **CPU Maintenance**

*Program of Study: CPU Technology*

*Credits: 1 | Prerequisites: Principles of Information Technology*

Covers electrical/electronic theory, computer hardware principles, installation, diagnosis, and repair of computer systems. Students reinforce, apply, and transfer skills to real-world scenarios.

### **CPU Technician Practicum**

*Program of Study: CPU Technology*

*Credits: 2 | Prerequisites: Principles of Information Technology*

Advanced study in computer technologies, electrical/electronic theory, and computer-based systems. Prepares students for CompTIA Network+ (N+) certification.

### **CPU Science I**

*Program of Study: Web Development; CPU Science*

*Credits: 1 | Prerequisites: None*

Introduces structured programming techniques, software development, documentation, and social responsibilities in technology. Students apply technical skills to business and emerging technologies.

### **AP Computer Science A**

*Program of Study: Computer Science*

*Credits: 1 | Prerequisites: CPU Science I*

College-level course developing coding skills, program design, and testing, including concepts of modularity, variables, and control structures.

## **Manufacturing**

### **Principles of Applied Engineering**

*Program of Study: Engineering*

*Credits: 1 | Prerequisites: None*

Introduces STEM fields, design processes, and engineering communication. Students work on projects using computer graphics, modeling, and presentations while exploring career opportunities.

### **Robotics I**

*Program of Study: Manufacturing; Transportation*

*Credits: 1 | Prerequisites: Principles of Applied Engineering*

Project-based course applying academic skills to robotic and automation design. Students build prototypes or use simulation software, exploring career paths in robotics.

## **Robotics II**

*Program of Study:* Manufacturing

*Credits:* 1 | *Prerequisites:* Robotics I

Covers artificial intelligence and programming in robotics. Students implement design processes in component projects, build prototypes, and test designs using software.

## **Engineering Design and Presentation I**

*Program of Study:* Engineering

*Credits:* 1 | *Prerequisites:* Principles of Applied Engineering

Continuation of Principles of Applied Engineering, focusing on design processes, software applications, and professional presentations. Students explore careers in engineering, technology, and drafting.

## **Engineering Scientific Research and Design**

*Program of Study:* Engineering

*Credits:* 1 | *Prerequisites:* Principles of Applied Engineering; Engineering Design and Presentation

Provides flexibility to develop curriculum for research and engineering projects, integrating data collection, analysis, and presentation with career and technical education objectives.

# **Welding**

## **Intro to Welding**

*Program of Study:* Welding

*Credits:* 1 | *Prerequisites:* None

Introduces basic welding processes, industrial safety, hand tools, machine use, measurements, and welding codes/standards.

## **Welding I**

*Program of Study:* Welding

*Credits:* 2 | *Prerequisites:* Intro to Welding

Job-focused welding instruction covering blueprint reading, cutting, and welding with various methods.

Students prepare for entry-level welding careers.

## **Welding II**

*Program of Study:* Welding

*Credits:* 2 | *Prerequisites:* Intro to Welding; Welding I

Advanced welding concepts and skills, integrating academic and technical knowledge. Students practice and apply skills in various real-world settings.

# **Transportation, Distribution & Logistics**

## **Automotive Basics**

*Program of Study:* Automotive Technology

*Credits:* 1 | *Prerequisites:* None

Introduces foundational vehicle systems, maintenance, safety, tool usage, and basic diagnostics for students pursuing automotive careers.

## **Automotive Technology I**

*Program of Study:* Automotive Technology

*Credits:* 2 | *Prerequisites:* Automotive Basics

Covers repair, maintenance, and diagnosis of vehicles using simulation labs and real vehicles. Prepares students for ASE certification in Braking Systems and Electrical/Electronic Systems.

## **Advanced Automotive Technology**

*Program of Study:* Automotive Technology

*Credits:* 2 | *Prerequisites:* Automotive Basics; Automotive Technology I

Advanced vehicle repair and diagnostics, focusing on Suspension/Steering and Engine

*It is the policy of Princeton High School not to discriminate on the on the basis of race, color, national origin, sex or handicap in its vocational programs, services or activities as required by Title VI of the Civil Right Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.*