



# Endorsement Guide

## Endorsement Guide Key:

Courses available to 9th grade students

\*Denotes advanced CTE courses.

All courses are one credit unless otherwise denoted in ( ).

## Note:

Detailed courses, endorsements, and information subject to change based on legislative decisions and interpretations.

## Public Service

The Public Service endorsement can be earned by completing a coherent sequence of four or more credits. Two of the courses must be in the same career cluster, at least one course should be an advanced course, and additional course(s) to create a four-credit coherent sequence.

### Education and Training

#### Early Learning

- Principles of Education and Training
- Principles of Human Services
- Child Development
- Child Guidance\* (2)
- Practicum of Early Learning\* (2)

#### Teaching and Training

- Principles of Education & Training
- Principles of Human Services
- Child Development
- Instructional Practices\* (2)
- Practicum in Education & Training\* (2)

### Health Science

#### Healthcare Diagnostics

- Principles of Health Science
- Medical Terminology
- Health Science Theory\*
- Anatomy and Physiology\*
- Practicum in Health Science: EMT\* (2)

#### Healthcare Therapeutic

- Principles of Health Science
- Medical Terminology
- Health Science Theory\*
- Anatomy and Physiology\*
- Practicum in Health Science: Certified Medical Assistant\* (2)

### Human Services

#### Cosmetology and Personal Care Services

- Cosmetology I w/lab\* (3)
- Cosmetology II w/lab \* (3)

#### Family and Community Services

- Lifetime Nutrition and Wellness (.5)
- Interpersonal Studies (.5)
- Principles of Human Services
- Professional Communications (.5)
- Child Development
- Counseling and Mental Health\*
- Family and Community Services\*
- Practicum in Human Services\* (2)

### Law and Public Service

- Forensic Science\*

### Science, Technology, Engineering and Math

#### Biomedical Science (Academy only)

- PLTW: Principles of Biomedical Science
- PLTW: Human Body Systems
- PLTW: Medical Interventions\*
- PLTW: Biomedical Innovation\*

## Arts and Humanities

The Arts and Humanities endorsement can be earned by completing one of the following four options:

<p><b>Option 1:</b> Complete five credits from the following list:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> World Geography</li><li><input type="checkbox"/> World History</li><li><input type="checkbox"/> US History</li><li><input type="checkbox"/> Government (.5)</li><li><input type="checkbox"/> Economics (.5)</li><li><input type="checkbox"/> AP Comparative Government (.5)</li><li><input type="checkbox"/> AP European History</li><li><input type="checkbox"/> AP Human Geography</li><li><input type="checkbox"/> Psychology (.5)</li><li><input type="checkbox"/> Sociology (.5)</li><li><input type="checkbox"/> AP Psychology (.5) / Social Studies Advanced Studies (.5)</li><li><input type="checkbox"/> Personal Financial Literacy (.5)</li><li><input type="checkbox"/> Personal Financial Literacy and Economics (.5)</li></ul>	<p><b>Option 2:</b> Complete a coherent sequence of four credits from one or two disciplines in the Fine Arts department:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> Art</li><li><input type="checkbox"/> Theatre Arts</li><li><input type="checkbox"/> Music - Band, Choir, Orchestra</li><li><input type="checkbox"/> Dance</li></ul>
<p><b>Option 3:</b> Complete four credits in the same language other than English:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> Spanish</li><li><input type="checkbox"/> French</li><li><input type="checkbox"/> German</li></ul>	<p><b>Option 4:</b> Complete two credits from one language other than English and two credits from a different language other than English to total four credits from the following list:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> Spanish</li><li><input type="checkbox"/> French</li><li><input type="checkbox"/> German</li><li><input type="checkbox"/> American Sign Language*</li><li><input type="checkbox"/> Computer Science*</li></ul> <p>If a student is transferring from a different district, other languages will be considered. *May not be accepted at every college as fulfilling WL requirement</p>
<p><b>Option 5:</b> Four English credits by selecting from the following:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> AP English III (Language &amp; Composition)</li><li><input type="checkbox"/> English IV or AP English IV (Literature &amp; Composition)</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> Communication Applications (.5)</li><li><input type="checkbox"/> Creative Writing</li><li><input type="checkbox"/> Literary Genres</li></ul>

## Multidisciplinary Studies

The Multidisciplinary endorsement can be earned by completing one of the following three options:

<p><b>Option 1:</b> Complete four credits from each of the following departments:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> English</li><li><input type="checkbox"/> Mathematics</li><li><input type="checkbox"/> Science</li><li><input type="checkbox"/> Social Studies</li></ul> <p>Must include English IV, and Physics and/or Chemistry.</p>	<p><b>Option 2:</b> Complete four credits in advanced placement or dual credit from the following departments:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> English</li><li><input type="checkbox"/> Mathematics</li><li><input type="checkbox"/> Science</li><li><input type="checkbox"/> Social Studies</li><li><input type="checkbox"/> Languages other than English</li><li><input type="checkbox"/> Fine Arts</li></ul>
<p><b>Option 3:</b> Complete four advanced courses from within one endorsement or among multiple endorsements. (* Denotes advanced applicable courses.)</p>	

## Science, Technology, Engineering and Mathematics

The STEM endorsement can be earned by completing Algebra II, Chemistry and Physics and one of the following five options:

### Option 1:

Complete two credits from the following list:

- Advanced Quantitative Reasoning
- PreCalculus, Honors/AP PreCalculus, OnRamps PreCalculus
- OnRamps Statistics
- AP Calculus AB
- AP Calculus BC
- Multivariable Calculus
- AP Statistics
- Dual Credit

### Option 2:

Complete two courses from the following list:

- AP Biology
- AP Physics I
- AP Physics C: Mechanics
- AP Physics C: Electricity and Magnetism
- AP Chemistry
- Environmental Systems
- AP Environmental Science
- Anatomy and Physiology\*
- Astronomy\*
- Advanced Animal Science\*
- Forensic Science\*
- Scientific Research and Design\*
- Engineering Science
- Dual Credit

### Option 3:

Complete a TEA-designated program of study related to STEM

#### Agriculture, Food, and Natural Resources:

##### Animal Science

- Principles of Agriculture, Food & Natural Resources
- Livestock Production\*
- Advanced Animal Science\*
- Veterinary Medical Applications\*
- Practicum in Agriculture, Food, and Natural Resources\* (2)

##### Applied Agricultural Engineering

- Principles of Agriculture, Food & Natural Resources
- Agricultural Mechanics & Metal Technologies
- Agricultural Equipment Design and Fabrication W/Lab\* (2)
- Practicum in Agriculture, Food, and Natural Resources\* (2)

##### Plant Science

- Principles of Agriculture, Food & Natural Resources
- Horticultural Science\*
- Floral Design I\*
- Greenhouse Operations and Production\*
- Advanced Floral Design\*
- Practicum in Agriculture, Food, and Natural Resources\* (2)

#### Architecture and Construction:

##### Architectural Design

- Principles of Architecture
- Architectural Design I
- Architectural Design II\* (2)
- Practicum in Architectural Design\* (2)
- Computer Aided Drafting for Architecture

#### Health Science:

##### Healthcare Diagnostics

- Principles of Health Science
- Medical Terminology
- Health Science Theory\*
- Anatomy and Physiology\*
- Practicum in Health Science: EMT\* (2)

##### Healthcare Therapeutic

- Principles of Health Science
- Medical Terminology
- Health Science Theory\*
- Anatomy and Physiology\*
- Practicum in Health Science: Certified Medical Assistant\* (2)

**Option 3 (Continued):**

Complete a TEA-designated program of study related to STEM

**Information Technology:**Networking Systems

- Principles of Information Technology
- Computer Maintenance
- Networking\*
- Practicum in Information Technology\* (2)
- Computer Science I/Honors Computer Science I

**Manufacturing:**Advanced Manufacturing and Machinery Mechanics

- Principles of Manufacturing
- Manufacturing Engineering Technology I
- Manufacturing Engineering Technology II
- Practicum in Manufacturing

**Science, Technology, Engineering and Math:**Biomedical Science (Academy only)

- PLTW: Principles of Biomedical Science
- PLTW: Human Body Systems
- PLTW: Medical Interventions\*
- PLTW: Biomedical Innovation\*

Cybersecurity

- Principles of Information Technology
- Foundations of Cybersecurity (PLTW) (STEM Academy only)
- Computer Science I/Honors Computer Science I
- Computer Maintenance
- Networking
- Practicum in Information Technology\* (2)
- Practicum in STEM\* (2)
- Independent Study in Technology Applications\*

Engineering (Academy only)

- PLTW: Introduction to Engineering Design
- Engineering Design and Presentation I
- PLTW: Aerospace\*
- PLTW: Civil Engineering and Architecture\*
- PLTW: Environmental Sustainability\*
- Digital Electronics\* (PLTW)
- Engineering Design and Presentation II
- Engineering Design and Problem Solving
- PLTW: Engineering Design and Development\*
- Practicum in STEM\* (2)

Programming and Software Development

- Computer Science I/Honors Computer Science I
- Computer Science II/Honors Computer Science II\*
- Honors Computer Science III\*
- Practicum in Information Technology\* (2)
- Independent Study in Technology Applications\*

**Transportation, Distribution and Logistics:  
(Aviation and Aeronautics Academy only)**Aviation (Flight)

- Intro to Aerospace and Aviation
- Intro to Aircraft Technology
- Aviation Ground School
- Practicum in Transportation Systems\* (2)

Drone (Unmanned Flight)

- Intro to Aerospace and Aviation
- Intro to Aircraft Technology
- Intro to Unmanned Aerial Vehicles
- Project-Based Research\* (Aviation)

**Option 4:**

Complete three credits in a coherent sequence from no more than two options above.

# Business and Industry

The Business and Industry endorsement can be earned by completing a coherent sequence of four or more credits

## Option 1:

### Agricultural, Food, and Natural Resources:

#### Animal Science

- Principles of Agriculture, Food & Natural Resources
- Livestock Production\*
- Advanced Animal Science\*
- Veterinary Medical Applications\*
- Practicum in Agriculture, Food, and Natural Resources\* (2)

#### Applied Agricultural Engineering

- Principles of Agriculture, Food & Natural Resources
- Agricultural Mechanics & Metal Technologies
- Agricultural Equipment Design and Fabrication W/Lab\* (2)
- Practicum in Agriculture, Food, and Natural Resources\* (2)

#### Plant Science

- Principles of Agriculture, Food & Natural Resources
- Horticultural Science\*
- Floral Design I\*
- Greenhouse Operations and Production\*
- Advanced Floral Design\*
- Practicum in Agriculture, Food, and Natural Resources\* (2)

### Architecture and Construction:

#### Architectural Design

- Principles of Architecture
- Architectural Design I
- Architectural Design II\* (2)
- Practicum in Architectural Design\* (2)
- Computer Aided Drafting for Architecture

### Arts, Audio/Video Technology and Communications: (CMP Academy only unless otherwise designated as All)

#### Design and Multimedia Arts

- Digital Arts and Animation\*
- Principles of Arts, AV & Communications (All)
- Commercial Photography I
- Commercial Photography II\*
- Commercial Photography II with Lab\* (2)
- Practicum in Commercial Photography\* (2)
- Graphic Design & Illustration I (All) (9 in Academy, 10 in Non-Academy)
- Graphic Design & Illustration II\*
- Graphic Design & Illustration II with Lab\* (2)
- Practicum in Graphic Design\* (2)

### Digital Communications

- Principles of Arts, AV & Communications (All)
- AV Production I (All)
- AV Production I with Lab (2) (All)
- AV Production II\* (All)
- AV Production II with Lab\* (2) (All)
- Practicum in AV\* (2)
- Professional Communications (.5) (All)

### Printing and Imaging Technology

- Printing and Imaging Technology I and II\*
- Printing and Imaging Technology I and II\* with Lab (2)
- Practicum in Printing and Imaging Technology\* (2)

### Business, Marketing, and Finance:

#### Accounting and Financial Services

- Principles of Business, Marketing, & Finance
- Business Information Management I
- Accounting I
- Financial Analysis
- Securities and Investments

#### Business Management

- Principles of Business, Marketing, & Finance
- Business Information Management I, II
- Business Law
- Virtual Business (.5) (BME only)
- Business Management\*
- Practicum in Business Management\* (2)

#### Entrepreneurship

- Principles of Business, Marketing, & Finance
- Business Information Management I
- Entrepreneurship (BME only)
- Practicum in Business Management\* (2)

#### Marketing and Sales

- Principles of Business, Marketing, & Finance
- Social Media Marketing\* (.5) (BME only)

### Hospitality and Tourism: (Culinary Arts Academy only)

#### Culinary Arts

- Principles of Hospitality & Tourism
- Intro to Culinary Arts
- Culinary Arts (2)
- Practicum/Extended Practicum in Culinary\* (3)

**Option 1 (Continued):**

**Information Technology:**

Networking Systems

- Principles of Information Technology
- Computer Maintenance
- Networking\*
- Practicum in Information Technology\* (2)
- Computer Science I/Honors Computer Science I

**Manufacturing:**

Advanced Manufacturing and Machinery Mechanics

- Principles of Manufacturing
- Manufacturing Engineering Technology I
- Manufacturing Engineering Technology II
- Practicum in Manufacturing

**Science, Technology, Engineering and Math:**

Cybersecurity

- Principles of Information Technology
- Foundations of Cybersecurity (PLTW) (STEM Academy only)
- Computer Science I/Honors Computer Science I
- Computer Maintenance
- Networking
- Practicum in Information Technology\* (2)
- Practicum in STEM\* (2)
- Independent Study in Technology Applications\*

Engineering (Academy only)

- PLTW: Introduction to Engineering Design
- Engineering Design and Presentation I
- PLTW: Aerospace\*
- PLTW: Civil Engineering and Architecture\*
- PLTW: Environmental Sustainability\*
- Digital Electronics\* (PLTW)
- Engineering Design and Presentation II
- Engineering Design and Problem Solving
- PLTW: Engineering Design and Development\*
- Practicum in STEM\* (2)

Programming and Software Development

- Computer Science I/Honors Computer Science I
- Computer Science II/Honors Computer Science II\*
- Honors Computer Science III\*
- Practicum in Information Technology\* (2)
- Independent Study in Technology Applications\*

**Transportation, Distribution, and Logistics:  
(Aviation and Aeronautics Academy only)**

Aviation (Flight)

- Intro to Aerospace and Aviation
- Intro to Aircraft Technology
- Aviation Ground School
- Practicum in Transportation Systems\* (2)

Aviation Maintenance

- Intro to Aircraft Technology
- Aircraft Airframe Technology\* (2)
- Aircraft Powerplant Technology\* (2)
- Aircraft Powerplant Technology/ Advanced Transportation Systems Laboratory\* (3)
- Practicum in Transportation Systems\* (2)

Drone (Unmanned Flight)

- Intro to Aerospace and Aviation
- Intro to Aircraft Technology
- Intro to Unmanned Aerial Vehicles
- Project-Based Research\* (Aviation)

**Option 2:**

The Business and Industry endorsement can be earned by completing a coherent sequence of four English elective credits to include three levels in one of the following areas:

- Public Speaking (.5)
- Debate I, II, III
- Independent Study in Speech (Debate IV)
- Advanced Journalism: Newspaper Production I, II, III
- Independent Study in Journalism (Newspaper IV)