



Science, Technology, Engineering & Mathematics

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



OPTION 1:

Complete a coherent sequence of four (4) or more credits in one (1) of the following career focus areas:

Engineering Project Lead The Way

- Honors Introduction to Engineering Design
- Professional Communications (.5)
- Honors Principles of Engineering
- Honors Digital Electronics*
- Honors Engineering Design & Development*

Engineering

- Concepts of Engineering & Technology
- Professional Communications (.5)
- Honors Engineering Design & Presentation
- Advanced Engineering Design & Presentation*
- Robotics & Automation*
- Dual Credit Robotics & Automation*
- Automation*
- Engineering Design & Problem Solving*
- Practicum in STEM*(2)

Petroleum Engineering

- Principles of Business, Marketing & Finance
- Professional Communications (.5)
- Concepts of Engineering & Technology
- Honors Engineering Design & Presentation*
- Advanced Engineering Design & Presentation*(2)
- Dual Credit Robotics & Automation*

OPTION 2:

Complete four credits in Computer Science from the following list:

- Honors Computer Science I, II, III*
- AP Computer Science*
- Independent Study in Technology Applications*
- Honors Independent Study in Technology Applications*
- Digital Art and Animation

OPTION 3:

Complete Algebra I, Geometry, Algebra II and two courses for which Algebra II is a prerequisite from the following list:

- Pre Calculus
- AP Calculus AB
- AP Calculus BC
- AP Statistics
- AP Computer Science*
- Advanced Quantitative Reasoning*
- Honors Advanced Quantitative Reasoning*
- Independent Study in Mathematics: History of Math (.5)
- Independent Study in Mathematics: Survey of Math (.5)
- Independent Study in Mathematics DAP: Honors Linear Algebra
- Honors Multivariable Calculus and Its Applications I
- Honors Ordinary Differential Equations & Their Application I
- Honors Mathematical Modeling Using Computer Simulation I
- Honors Number Theory I AB
- Honors Number Theory IT (.5)
- Honors Calculus Based Statistics I
- Honors Logic Design Using Boolean Algebra
- Honors Linear Algebra
- Dual Credit— 3 college credit hours equals 1/2 high school credit.

OPTION 4:

Complete two credits from the following list:

- Earth and Space Science
- Environmental Systems
- AP Biology
- AP Chemistry
- AP Physics 1: (Algebra-based)
- AP Physics 2: (Algebra-based)
- AP Physics C
- AP Environmental Science
- IB Biology
- IB Chemistry
- IB Physics
- IB Environmental Systems
- Scientific Research and Design
- Anatomy and Physiology
- Dual Credit Anatomy and Physiology
- Engineering Design and Problem Solving
- Principles of Engineering
- Medical Microbiology
- Pathophysiology
- Advanced Animal Science
- Advanced Biotechnology
- Advanced Plant and Soil Science
- Food Science
- Forensic Science

OPTION 5:

Complete three (3) additional credits in a coherent sequence from no more than two options above.



Multidisciplinary Studies

The Multidisciplinary Studies endorsement can be earned by completing one of the following three (3) options:

OPTION 1:

Complete four credits from each of the following departments:

- English
- Mathematics
- Science
- Social Studies

Must include English IV, and Physics and/or Chemistry.

OPTION 2:

Complete four advanced placement, International Baccalaureate, or dual credit credits from the following departments:

- English
- Mathematics
- Science
- Social Studies
- Economics
- Languages other than English
- Fine Arts

OPTION 3:

Complete four advanced courses from within one endorsement or among multiple endorsements.

(*Denotes advanced applicable courses.)

* Denotes advanced CTE courses.

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

Note: Detailed courses, endorsements, and information subject to change based in legislative decisions and interpretations.



Business and Industry

OPTION 1:

The **BUSINESS AND INDUSTRY** endorsement can be earned by completing a coherent sequence of **Four (4) or more credits in one (1) of the following career clusters:**

Agriculture, Food & Natural Resources

- Principles of Agriculture, Food & Natural Resources
- Principles & Elements of Floral Design
- Livestock Production
- Small Animal Management (.5)
- Horticulture Science
- Equine Science (.5)
- Agribusiness, Management & Marketing (.5)
- Wildlife, Fisheries, & Ecology Management (.5)
- Landscape Design (.5)
- Turf Management (.5)
- Advanced Animal Science*
- Advanced Plant & Soil Science*
- Veterinary Medical Applications*

Architecture and Construction:

- Principles of Architecture and Construction
- Architectural Design I
- Construction Technology I* (2)
- Architectural Design II* (2)
- Construction Management I* (2)
- Construction Technology II* (2)
- Mill & Cabinetmaking Technology* (2)
- Construction Management II* (2)
- DC in Advanced Construction Management*
- Electrical Technology I*
- Electrical Technology II* (2)
- Interior Design
- Plumbing Technology I
- Advanced Interior Design*
- Plumbing Technology II* (2)
- Practicum/Ext. in Architectural Design*(2-3)

Arts, A/V Technology & Communications

- Principles of Arts, Audio/Visual Technology & Communications
- Audio/Video Production I
- Graphic Design & Illustration I
- Advertising & Sales Promotion (.5)
- Audio/Video Production II Lab* (2)
- Animation I
- Animation II Lab* (2)
- Graphic Design & Illustration II Lab* (2)
- Commercial Photography I
- Printing & Imaging Technology I
- Printing & Imaging Technology II Lab* (2)
- Commercial Photography II Lab* (2)
- Practicum/Ext. in Commercial Photography (2-3)
- Practicum/Ext. in Printing & Imaging Tech (2-3)

Business, Finance, and Information Technology

- Principles of Bus. Marketing, & Finance
- Principles of Information Technology
- Business Information Management I
- Money Matters
- Telecommunications and Networking I
- Honors Computer Programming I
- Business Management
- Business Information Management II
- Business Law
- Global Business (.5)
- Accounting I
- Honors Internetworking Technologies I
- Digital and Interactive Media I
- Animation
- Accounting II
- Banking & Financial Services*
- Honors Internetworking Technologies II
- Research in Information Technologies I
- Web Technologies
- Practicum/Ext. in Business Management* (2-3)

Hospitality & Tourism

- Principles of Hospitality and Tourism
- Hotel Management (.5)
- Travel and Tourism Management (.5)
- Intro to Culinary Arts
- Lifetime Nutrition and Wellness (.5)
- Hospitality Services* (2)
- Sports and Entertainment Marketing (.5)
- Social Media Marketing (.5)
- Culinary Arts*(2)
- Advanced Culinary Arts* (2)
- Food Science*
- Practicum/Ext in Hospitality Services*(2-3)
- Practicum/Ext in Culinary Arts* (2-3)

Manufacturing

- Principles of Manufacturing
- Introduction to Welding
- Welding I* (2)
- Welding II* (2)
- Practicum/Ext. in Manufacturing*(2-3)

Marketing

- Prin. of Business, Marketing, & Finance
- Sports and Entertainment (.5)
- Travel & Tourism Management (.5)
- Fashion Marketing (.5)
- Advertising (.5)
- Business Information Management I
- Business Law (.5)
- Global Business (.5)
- Entrepreneurship
- Social Media Marketing (.5)
- Advanced Marketing
- Practicum/Ext. in Marketing*(2-3)

Transportation, Distribution & Logistics (TD&L)

- Principles of Transportation Systems: I Automotive
- Principles of Transportation Systems: Collision
- Principles of Transportation Systems: Aircraft
- Automotive Technology I
- Refinishing Technology
- Aircraft Technology* (2)
- Concepts of Engineering
- Automotive Technology II*(2)
- DC Electronics: Avionics*
- DC Practicum: Aerospace I*
- Engineering Design and Presentation*
- Advanced Aircraft Technology* (2)
- DC Advanced Automotive Technology*(2)
- Collision Repair* (2)
- Paint & Refinishing*(2)
- DC Aircraft Technology* (2)
- DC Adv. Aircraft Technology* (2)
- DC Practicum I:Aviation Composite*
- DC Logistics, Planning & Mgmt Systems*
- DC Aircraft Powerplant Technology* (2)
- DC Practicum: Aerospace II*
- Ext. Paid Practicum in Transportation Systems*(2-3)

OPTION 2:

The Business and Industry endorsement can also be earned by completing a coherent sequence of four(4) English elective credits, which includes one prerequisite course and three (3) advanced courses in one of the following areas:

- Advanced Broadcast Journalism I, II, III**
- Advanced Journalism: Newspaper I, II, III**
- Advanced Journalism: Yearbook I, II, III**
- Debate I, II, III**
- Public Speaking**



Arts and Humanities

The Arts and Humanities endorsement can be earned by completing one of the following six (6) options:

OPTION 1:

Complete English IV and five (5) credits from the following list:

- World Geography
- World History
- US History
- US Government (.5)
- Economics (.5)
- Human Geography
- European History
- Psychology (.5)
- Sociology (.5)
- Social Studies Research Methods
- Special Topics in Social Studies (.5)
- Advanced Placement, International Baccalaureate, and dual credit social studies

OPTION 2 & 4:

Complete four (4) credits in the same language other than English from the following list:

- American Sign Language
- Chinese
- French
- German
- Italian
- Japanese
- Latin
- Spanish

OPTION 3:

Complete two (2) credits from one (1) language other than English and two(2) credits from a different language other than English to total four credits from the following list: in the same language other than English from the

- Chinese
- French
- German
- Italian
- Japanese
- Latin
- Spanish

If a student is transferring from a different district or is otherwise eligible, other languages will be considered.

OPTION 5:

Complete a coherent sequence of four credits from one or two disciplines on the Fine Arts department (or innovative courses approved by the commissioner):

- Art
- Theatre Arts
- Music
- Dance

OPTION 6:

Complete four (4) English elective credits from the following:

- AP English Literature & Composition
- Creative Writing
- English IV
- Humanities
- IB Lang. Stud. At Higher Level
- Independent Study in English
- Literary Genres
- Research and Technical Writing
- Communications Applications



Public Service

The Public Service endorsement can be earned by completing a coherent sequence of four or more credits from one of the following:

OPTION 1:

Complete four credits from each of the following career clusters:

Education & Training and Human Services

- Principles of Education & Training
- Professional Communications (.5)
- Human Growth & Development
- Lifetime Nutrition & Wellness (.5)
- Instructional Practices in Ed. & Trng*(2)
- Child Development (.5)
- Unpaid/Ext. Practicum in Ed. & Trng* (2-3)
- Principles of Human Services
- Lifetime Nutrition & Wellness (.5)
- Child Development (.5)
- Money Matters
- Family & Community Services (.5)
- Interpersonal Studies (.5)
- Parenting Educ. For School-Age Parents

- Paid Practicum in Human Services*(3)
- Counseling & Mental Health
- Principles of Business, Mktg. & Finance
- Professional Communications (.5)
- Introduction to Cosmetology
- Cosmetology I*(3)
- Cosmetology II*(3)

Government & Public Administration

- Principles of Business, Mktg & Finance
- Principles of Govt. & Public Admin.
- Professional Communications (.5)

- Public Management Administration
- Planning & Governance
- Global Business (.5)

- Business Law (.5)
- Practicum in Local, State, & Fed. Govt*(2)

Health Science

- Medical Terminology
- Principles of Health Science
- Principles of Biotechnology
- Lifetime Nutrition & Wellness (.5)
- Health Science*(2)
- Problems and Solutions: Pharmacology

- Problems and Solutions: Gerontology
- Pathophysiology (.5)
- Anatomy & Physiology
- Counseling & Mental Health
- Human Body Systems
- Sports Medicine I, II*(2), III*(2)

- Medical Intervention
- Medical Microbiology (.5)
- World Health Research
- Practicum/Ext. in Health Science*(2-3)

Law, Public Safety, Corrections & Security

- Prin. of Law, Public Safety & Security
- Professional Communications (.5)
- Court Systems & Practices
- Firefighter I

- Firefighter II*(2)
- Law Enforcement I
- Law Enforcement II
- Disaster Response

- Forensic Science
- Correctional Services
- Security Services
- Unpaid Practicum in Law Enforcement*(2)

OPTION 2:

Complete four (4) credits in Junior Reserve Officer Training Corp (JROTC): JROTC I, II, III, IV.