## SCIENCES AND MATHEMATICS PATHWAY DIPLOMA

Graduation Requirements for a Diploma with an Emphasis in Sciences and Mathematics Careers (If an AP Course is not offered at the time the student needs, the student may apply to take the equivalent class at a college under Concurrent Enrollment.)

English 4.0 Credits

Freshman English (1.0) Sophomore English (1.0)

Junior English or AP English Literature (1.0)

Senior English or AP English Literature (1.0), Senior Composition (1.0)

Social Studies 3.5 Credits

American Government (.50)

Global Geography (.50) or AP Human Geography (1.0)

American History or AP American History (1.0)

World History or AP World History (1.0)

Additional credits as needed to earn 3.5 total social studies credit

Mathematics 4.5 Credits

Geometry or Geometry Honors (1.0) Algebra II or Algebra II Honors (1.0)

College Algebra and College Trigonometry (1.5)

AP Calculus/Calculus I (1.0)

Science 5.0 Credits

Freshman Science I (.50) Freshman Science II (.50) Cellular Biology (1.0) Chemistry (1.0) Physics (1.0)

AP Chemistry (2.0) or AP Physics (1.0)

Career and Technical 1.0 Credit

Education College and Career Prep. (.5)

Additional .50 credit in Career and Technical Education coursework as

decided upon by parent, advisor and student.

Fine Arts <u>1.0 Credit</u>

Introduction to Art (.25)

Additional .75 credit in Fine Arts coursework as decided upon by parent,

advisor, and student.

World Language 2.0 Credits of the same language

Students may enroll in a language of their choice.

Students who plan to attend a four-year college should plan to take three

vears of the same language.

Wellness <u>1.0 Credit</u>

The Health & Wellness Experience (.25)

Additional .75 credit in Wellness/P.E. coursework as decided upon by parent,

advisor, and student.

## **Advising**

## 2.0 Credit

<u>Total Credits</u> – The student must earn at least 29 credits for this pathway diploma.

<u>Job Shadows</u> – All students must complete 3 one-half day shadowing experiences. One experience must be in a *Science or Mathematics-related* field.

Community Service - 40 hours must be logged to receive .25 credit

Internship - 40 hours in a Science or Mathematics-related field must be logged to receive .25 credit

<u>Pathway Exploration</u> – Additional 40 hours in a Science or Mathematics-related field must be logged to receive .25 credit. This may be completed through additional shadowing, community service, or internship.

Portfolio - The ICAP portfolio is required for this pathway diploma

Senior Project - A senior project is required for this pathway diploma

## **Sample Careers for Sciences and Mathematics Pathway**

- Aerospace Engineer
- Architect
- Atmospheric Science
- Bio Tech Engineering
- Chemist
- Civil Engineer
- Computer Engineer
- Electrical Engineer
- Mechanical Engineer
- Structural Engineer
- Systems Analyst
- Teacher of Science or Math