PERRY HIGH SCHOOL

STEM DIPLOMA
STEM SCHOLAR DIPLOMA

(Science, Technology, Engineering, and Mathematics)

Program Requirements

Credit Requirements

Students need 22 credits to graduate. Students in the STEM program need 4 credits of English, 3 credits of Social Studies, 1 credit of PE, .5 credit of Health, 2 credits of World Language, 5 credits of Math, and 6 credits of Science. Although 3 credits of Science and 4 credits of Math are required for graduation, students in the STEM program are required to do the following additional credits: 1 credit in Science, 2 credits of Engineering or Science related courses, and 1 additional credit of Math (Statistics). The remaining credits needed for graduation are elective classes.

STEM Scholar Diploma

Students in the STEM Scholar program are required to take Honors/AP classes in Math, Social Studies, English and Science. Multi Variable Calculus is the final required Math class STEM Scholar students will take. However, depending upon ability, entrance level in Math, and teacher recommendation, some students may be able to take Linear Algebra. Four (4) of the six (6) credits required for Science and Menu/Focus courses must be in Biology, Chemistry and Physics. Students may choose dual enrollment English their senior year instead of AP English 12. Students must maintain a 3.8 weighted GPA throughout their enrollment in the program. Summer programs are required. Outlined below are the specific courses required for each genre.

Social Studies

GRADE

9 AP World History
11 AP American/Arizona History
12 AP Government and AP Macro Economics

English

9 Honors English 9
10 Honors English 10
11 AP English 11
12 AP English 12 or Dual Enrollment English 12

Math

9 Honors Algebra 2
10 Brief Calculus/Honors Pre-Calculus and AP Statistics
11 AP Calculus BC
12 Multi Variable Calculus

A student who enters at the Brief Calculus level would be required to take Linear Algebra to complete their 5th year/credit of Math.

Science

9 Honors Biology
10 Honors Chemistry
11 AP Chemistry and additional Menu/Focus Course
12 AP Physics and additional Menu/Focus courses

Menu/Focus course are courses in Science (AP Biology, Human Biology, AP Environmental Science), Engineering and Computer Science

STEM Diploma

Students in the STEM Diploma program are required to take Honors/AP classes in Math and Science. Students may take Honors/AP courses in Social Studies and English as well but it is not required for the STEM Diploma. AP Calculus BC is the final required Math class the STEM Diploma students will take. However, depending upon ability, entrance level in Math, and teacher recommendation, some students may be able to take Linear Algebra. Four (4) of the six (6) credits required for Science and Menu/Focus courses must be in Biology, Chemistry and Physics Students must maintain a 3.5 weighted GPA throughout their enrollment in the program. Summer programs are required. Outlined below are the specific courses required for each genre.

Social Studies

GRADE

9 World History
11 American/Arizona History
12 Government and AP Macro Economics

English

9 English 9
10 English 10
11 English 11
12 English 12 or Dual Enrollment English

Math

9 Honors Geometry
10 Honors Algebra 2
11 Brief Calculus/Honors Pre-Calculus and AP Statistics
12 AP Calculus BC

Science

9 Honors Biology
10 Honors Chemistry
11 AP Chemistry and additional Menu/Focus Course
12 AP Physics and additional Menu/Focus courses

Menu/Focus course are courses in Science (AP Biology, Human Biology, AP Environmental Science), Engineering and Computer Science

STEM Experience

The Summer STEM Experience is required after the student's junior year. Although details of what the STEM Experience will entail are still being processed, participation in the STEM Experience is required. A Summer STEM Experience fee may apply and will vary with cost depending upon the specific STEM Experience chosen.

Additional Science and Math Credits

The additional Science credits, Menu/Focus courses (Beyond the four (4) required in Biology, Chemistry and Physics) may be taken in Computer Science, Biotechnology, Science, or Engineering classes. The Science classes may be taken at Perry High School. The Computer Science and Engineering classes may be taken at Perry High School. The Biotechnology classes may be taken at a Maricopa Community College School, or ASU, dependent upon the specific course and instructor availability. Courses that are taken at a Maricopa Community College or ASU will be reciprocated as high school elective credits. The additional Math credit is AP Statistics.

College Courses

Students must have approval from the STEM Coordinator prior to taking a course at the college. It is the student's responsibility to enroll at the college, register, and pay for classes he or she wants to take. Transportation to the college is also the student's responsibility.

Students are encouraged to complete a Program of Study. As with all of our students at PHS, they are strongly encouraged to research their college of choice to determine if and what credits will transfer.

Online Courses

STEM students may take courses online through Chandler Online Academy or another approved source. All classes taken either online or through other approved sources must be approved by the STEM Coordinator. If the student does not receive prior approval, he or she may not receive credit for the course. Students will not be able to take AP courses online, those must be done in the classroom.

Summer School

STEM students may take summer school courses. All summer school course work must be approved by the STEM Coordinator or the student may not receive credit.

Required Tests

STEM students are required to take the PSAT and SAT or ACT tests. The PSAT test may be taken during their Freshman or Sophomore years, but must be taken during their Junior year to qualify for National Merit awards and to remain in the STEM program. ACT and SAT tests are taken during their Junior and Senior year. STEM students are also required to take the AP test for any AP course they may be taking, even if the course is offered for dual enrollment credit as well. Financial assistance may be available for those who qualify.

College Admissions

STEM students who successfully completed the program are required to apply for admission into a university or college. College admission assistance will be given through the Career Center at Perry High School.

Minimum GPA Requirements

STEM Scholar students must maintain a minimum weighted GPA of 3.8, while STEM Diploma students must maintain a minimum weighted GPA of 3.5. Students who fall below the minimum GPA guidelines at semester will be placed on academic probation. Students placed on academic probation will have the following semester to raise their GPA up to the minimum requirements. Students who fail to raise their GPA up to the minimum requirements will be dismissed from the program.

Recognition

STEM students who complete the requirements of the program will be recognized at the graduation ceremony. STEM students will receive an additional diploma, a hood to be worn at the ceremony and their accomplishment will be noted in the graduation program.

Communication

All parent communication will be done through the website on the STEM program bulletin board. Parents are encouraged to visit the bulletin board weekly for any updates. Emails will also be sent out to STEM parents with important program details, offerings, changes, or upcoming events.

STEM Pathways

STEM students may view the various pathways available online on the STEM website. STEM pathways are an example of the various possible courses that a STEM student can take depending on their STEM interest. STEM pathways are meant to be used as an assistive tool in helping the student take the courses within their STEM interest but are not the only pathways that are available.

Student Conduct

Students in the STEM program are expected to follow the student code of conduct as outlined in the student handbook. Failure to follow the student code of conduct may result in removal from the STEM program.