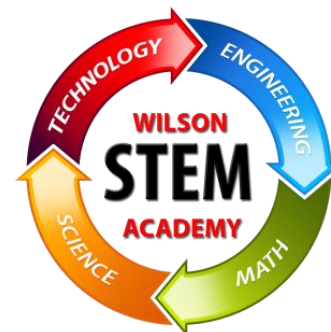


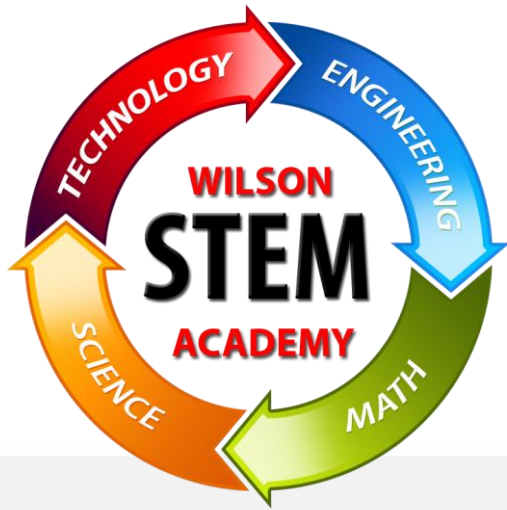
WILSON **STEM** ACADEMY

Pathways available in 2014 - 2015



Grade	Engineering	Computer Science / Information Technology	Bio-Medical	Material Science
9	Honors Introduction to Engineering Design (IED)			
10	Honors Biotechnical Engineering (BE) Honors Computer Integrated Manufacturing (CIM) Honors Principles of Engineering (POE) Honors Computer Science and Software Engineering (CSE)	Honors Computer Science and Software Engineering Web Design & Digital Development Digital Video & Computer Animation Honors Digital Electronics Honors Computer Int. Manufacturing AP Computer Science	AP Biology Anatomy & Physiology Biomedical Technology AP Environmental Science Ethics & Contemporary Issues Biotechnical Engineering Health Science Microbiology	AP Chemistry Forensics Science Ethics and Contemporary issues Organic Chemistry Materials Science
11	Honors Digital Electronics (DE) Honors Civil Engineering & Architecture (CEA) Honors Aerospace Engineering (AE) AP Computer Science			
12	Honors Engineering Design & Development (EDD)	Technological Innovation & Design	Health Occupations or Capstone Research	Capstone Research
	Student must choose 4 courses	Student must choose 3 courses	Student must choose 3 courses	Student must choose 3 courses

Wilson School District **STEM** Academy



STEM Academy

This academy will allow students to focus their studies on integrated Science, Technology, Engineering and Math concepts. The four focus areas within the STEM Academy are Engineering, Computer Science, Material Science, and Biomedical Science.

Please see your counselor for more details.

Engineering

Graduation Requirements

Subject	Minimum Credit Requirement - 26	
Science	4	9 th , 10 th , 11 th Required 12 th can be a Science or Technology & Engineering selection
Math	4	9 th , 10 th , 11 th , 12 th
English	4	9 th , 10 th , 11 th , 12 th
Social Studies	3	9 th , 10 th , 11 th
PLTW Engineering	4	9 th , 10 th , 11 th , 12 th Required See PLTW STEM course offerings.
Required Courses	2.25	<ul style="list-style-type: none"> Health-.5 credit Personal Finance-.5 credit Physical Education-1 credit Driver's Education
Electives	4.75	Student choice

STEM Academy Requirements

1. Senior collaborative research & design project that focuses on a specific field of STEM

Students will work with their graduation project teacher (a STEM advisor), and a local STEM professional from our list of partners to complete their graduation project.

2. STEM student showcase

A student showcase will be held at the conclusion of each school year and will focus on exhibiting student work. This exhibit will be held in May and will be a required component senior capstone course and the STEM academy. Local STEM professionals will also be involved to provide feedback and expertise to students.

3. I-STEM – 9th grade option

I-STEM is a Science, Technology, Engineering, and Math course of study that integrates Honors STEM Physics, Honors Introduction to Engineering and Design, and Algebra II or Geometry. The course is designed to help students explore and acquire the basic research and problem solving skills to aid their later experiences in the STEM Academy or a potential career in a STEM related field. Field experiences, lab experiments, and class trips will reinforce course concepts, and students will be expected to utilize critical thinking skills and methods of scientific inquiry to further their knowledge of science as a process. Because of the collaborative nature of this course, each student will be issued an electronic device to facilitate the learning process.

