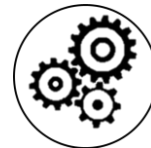




MSAT Pathway



Principal: Damian Perry

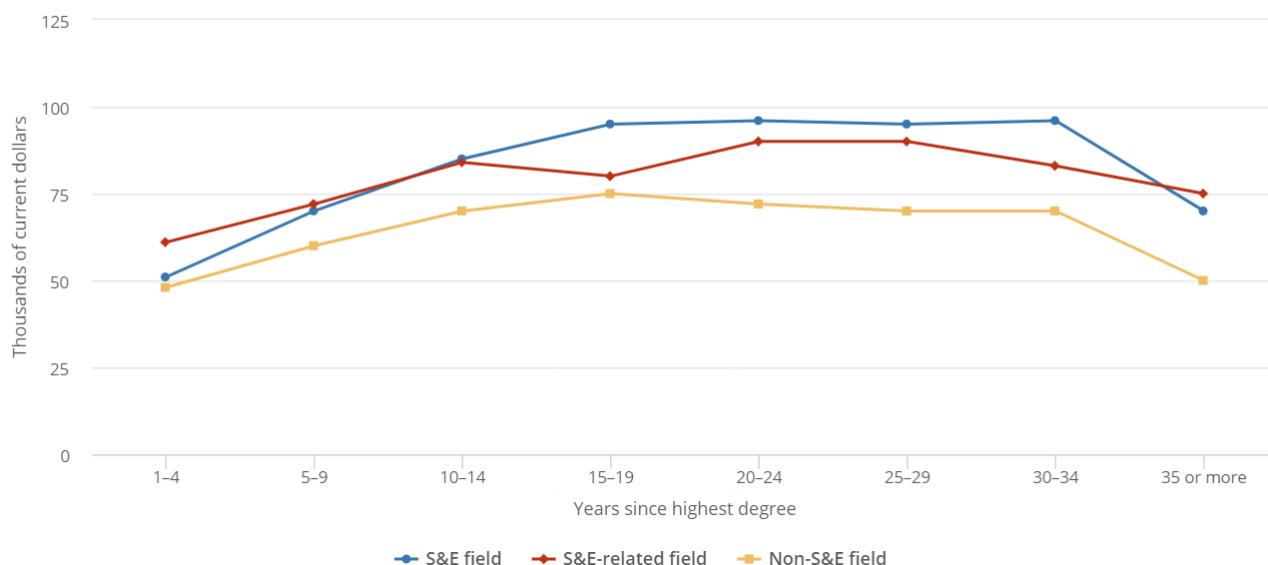
Pathway Lead: Carrie Russell

OVERVIEW OF THE MSAT PATHWAY

The King MSAT (Math, Science, Applied Technology) Pathway is designed for students that are prepared to take honors math and science classes while exploring careers in the engineering and medical professions. The goal of a STEM pathway is to help students develop problem solving skills through the use of collaborative, open ended projects. Students in this pathway will pick either the engineering or the medical tracks and take courses that will support most students attending a four year university in a STEM field upon graduation from King High School.

According to a study done by the National Science Foundation, workers with a degree in a Science or Engineering field (or related field) can expect to earn more money than workers without an S&E degree during all stages of their career.

Median salaries for workers with a bachelor's degree or higher, by broad field of degree and years since highest degree: 2019



Potential Engineering Careers

Possible Career Choice	Education	Average Salary
IT Support Specialist	AD	\$48,456
Programmer	AD/BS	\$73,300
Web Developer	AD/BS	\$76,000
Industrial Engineer	BS	\$80,500
Mechanical Engineer	BS	\$85,700
Statistician	BS	\$86,600
Actuary	BS	\$105,100
Software Developer	BS	\$108,700

Potential Medical Careers

Possible Career Choice	Education	Average Salary
EMT	Certificate	\$45,100
Biologist	BS	\$74,100
Registered Nurse	BS	\$92,800
Physician's Assistant	MS	\$115,700
Physician	MD	\$155,600
Dentist	MD	\$216,300
Surgeon	MD	\$298,000
Anesthesiologist	MD	\$327,300

KING ALUM CAREER SPOTLIGHT



Travis M. Spencer
Head of Supplier Diversity & Inclusion
Ford Motor Company

Travis Spencer graduated from King HS in 2007 and went on to earn a BS in Accounting and a MBA from the University of Detroit Mercy. While still in college, Travis interned for Ford Purchasing and has worked at Ford full time since 2011 in various jobs of increasing responsibility.

MSAT COURSE PROGRESSION



Engineering Track



9th Grade	Elective: Career Exploration Math: Algebra 1 Honors or Geometry Science: Biology
10th Grade	Elective: AP Computer Science Principles Math: Geometry Honors or Algebra 2 Science: Chemistry
11th Grade	Elective: Engineering Technology (CAD) Math: Algebra 2 Honors or Precalculus Science: Physics
12th Grade	Elective: Robotics - Mechatronics Math: Precalculus or AP Calculus Science:



Medical Track



9th Grade	Elective: Career Exploration Math: Algebra 1 Honors or Geometry Science: Biology
10th Grade	Elective: Anatomy and Physiology Math: Geometry Honors or Algebra 2 Science: Chemistry
11th Grade	Elective: AP Psychology Math: Algebra 2 Honors or Precalculus Science: Physics
12th Grade	Elective: Sports Medicine Math: Precalculus or AP Calculus Science: