



School of Technology, Engineering, and Media (STEM)

FRANKLIN HIGH SCHOOL

STEM is a unique program that allows students to focus on one of four areas of study:

Computer Specialist

Computer Specialists incorporate a standards-based/mastery approach that allows students to accelerate learning as they demonstrate mastery of each curricular standard.

Engineering Specialist

Engineering Specialists complete mastery courses in Computer Assisted Drafting and Engineering.

Media Specialist

The Media Specialist program prepares students for career paths in the field of media communications behind, and/or in front of the camera.

Generalist

Students interested in all three major areas of STEM can choose the Generalist strand. Mastery of this strand is obtained by completing coursework in the three specialist areas.

After completing core introductory classes, students will select one area of study for their mastery coursework. Each specialist area provides the skills necessary to gain employment or to pursue advanced study. Course instruction is enhanced through mentoring and internships.

ACADEMY BENEFITS

- Opportunity to receive industry standard certifications
- Course selection preferences when enrolling for STEM classes
- Articulated courses with American River College & Cosumnes River College
- Career and college counseling
- Advocacy class comprised of STEM students
- Core academic English, Social Studies, and Science teachers for STEM students
- Hands-on-experience with state-of-the-art technology
- Summer or after-school work experience, mentoring, internship, and employment opportunities
- Field trips and special events
- Academy leadership opportunities

SAMPLE CAREER OPTIONS

Graduates of the STEM Academy have a multitude of future career paths available. Below is a sample list of career options:

High School Diploma

- Visual Artist
- Sound Technician
- Help Desk Specialist
- Web Page Developer
- CAD Technician
- Drafting Apprentice

AA, AS Degree or Certificate

- Special Effects Coordinator
- Graphic Designer
- Network Administrator
- Multimedia Specialist
- Surveyor
- Civil Engineering Technician

BS, BA or Post-Graduate Degree

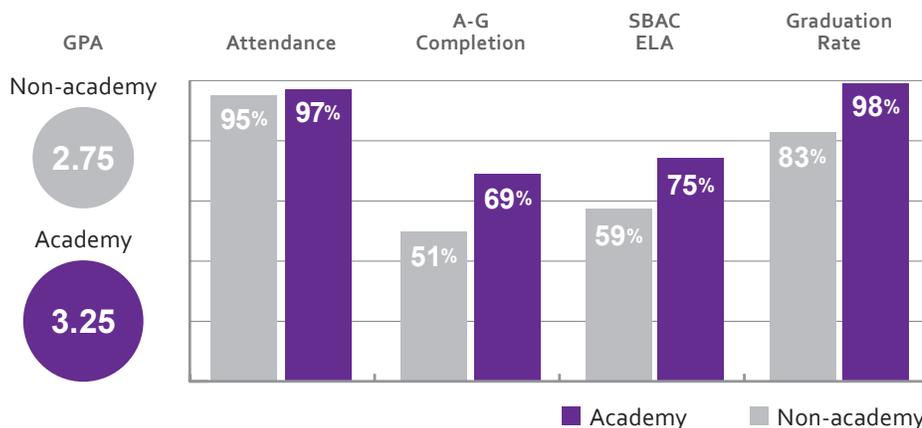
- Industrial Designer
- Sound Engineer
- Computer Programmers
- Computer Security Specialist
- Mechanical Engineer
- Aerospace Engineer

“ I believe STEM is an outstanding program for youth, such as myself, because not only does it help students better understand technology, but it also prepares students for both college as well as employment.”

C.C. (STEM student, Computer Specialist)



ACADEMY VS. NON-ACADEMY STUDENT DATA



NON-DISCRIMINATION and ACCESS POLICIES | District programs and activities shall be free from discrimination, including harassment, intimidation and bullying based on a student's actual or perceived disability, gender, gender identity, gender expression, nationality, race, ethnicity, color, ancestry, religion, sexual orientation, age, marital or parental status, or association with a person or group with one or more of these actual or perceived characteristics. This policy applies to all acts related to school activity or school attendance occurring within a school under the jurisdiction of the District Superintendent. The Elk Grove Unified School District welcomes those with disabilities to participate fully in the programs, services, and activities offered to students, parents, guardians and members of the public. If you need a disability-related modification or accommodation, including auxiliary aids or services, to participate in any program, service or activity offered to you, please contact the Career Technical Education Department at 916-686-7709 at least 48 hours before the scheduled event so that we may make every reasonable effort to accommodate you. Government Code: Section 54953.2; Americans with Disabilities Act of 1990, Section 202 (42 U.S.C. Section 12132.)

SAMPLE CAREER-THEMED COURSES

The sample program of study outlined below lists academy-specific courses and does not include the full list of graduation requirements in writing, math, VAPA, WL, etc. These courses are subject to change based upon industry trends.

- 9th Grade**
- **Computer Technology:** This course focuses on computer technologies and their uses as applied to academic success. Students will learn keyboarding skills, word processing, computer operations, spreadsheets, database, library research technologies and telecommunications.
 - **Intermediate Computers:** This course provides students an opportunity to continue hands-on experience with computer operations. Students will learn programming techniques, how to use advanced word-processing, desktop publishing to include multimedia presentation and other management systems.

Computer Specialist

- 10th Grade**
- **Computer Networking Basics, LAN:** This in-depth course explores wiring, protocols, management and configuration of Local Area Networks (LAN). Upon successful completion of this course, students will be fluent in setup and management of LAN routers, switched hubs, servers and workstations.
- 11th Grade**
- **Web Design and Development:** This course provides students with historical background, varied programming skills, design elements and current technological practices that will be used to develop professional Web pages.
- 12th Grade**
- **Computer Technology Service Repair:** This course is designed to prepare students for a variety of entry-level careers in computer technology. Students will acquire the skills necessary to build, repair, upgrade and install computers. Troubleshooting, as well as network installation techniques, will also be featured.

Media Specialist

- 10th Grade**
- **Video Production I:** This course is an introductory, hands-on course where students learn to use digital video and television studio production equipment in both a classroom and studio environment. Computers running software for nonlinear editing will be used to produce a variety of video projects for classroom and school-wide broadcasting.
- 11th Grade**
- **Video Production II:** This course builds on skills learned in Video I. The emphasis of this course is to plan and produce intermediate projects in a variety of digital film and television subjects. Students will further develop independent skills and team leadership roles in all areas of digital media production.
- 12th Grade**
- **Television Occupations I & II:** These courses will emphasize all aspects of digital video creation, from preproduction planning all the way through final video editing and output. Software programs to be used include movie, Adobe Premiere, Final Cut Pro and Adobe After Effects. Students will produce, direct, and edit a number of digital video projects.

Engineering Specialist

- 10th Grade**
- **Computer Aided Drafting and Design (CADD):** This course serves as the foundation for all other CAD courses. The focus is on developing computer-aided design/drafting skills, for those with little or no CAD experience and using Auto CAD software.
- 11th Grade**
- **Engineering A:** This course is designed for students to engage in various hands-on activities to explore the nature of assorted engineering fields. During this exploration, students will gain insight into the educational requirements of the engineering profession, required skills for most engineers and the roles and functions of engineers.
- 12th Grade**
- **Engineering B:** This course is designed to build on the foundation begun in Engineering A. Students continue to survey aspects of the primary engineering disciplines and principles of engineering style problem solving.



“STEM is an absolutely amazing program that has helped me realize what I want to do with my future and in college. Through STEM, I have also made many friends and have experienced so much more than I could have otherwise.”

M.T. (STEM, Media Specialist)

“STEM has allowed me to find my true passion which is engineering, specifically aeronautical engineering. With the skills I have learned in the engineering branch, I hope to get a degree in aeronautical engineering and work for Boeing or Lockheed Martin.”

E.M. (STEM, Engineering Specialist)

CONTACT INFORMATION



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