Colorado Association of Black Professional Engineers and Scientists (CABPES)
Paths to Careers in STEM

Which classes/courses should I take in high school?

Students should take algebra 1 & 2, geometry, trigonometry; AP Calculus is optional. Students should take science classes, chemistry, and physics.

Which clubs/organizations/extracurricular activities will be the most beneficial to join?

Students can join the engineering, science, and math clubs. Students should join afterschool STEM programs like JETS. Students are encouraged to volunteer for different community programs. It is okay for students to participate in sports because they learn soft skills such as leadership, discipline, teamwork, and competition.

What should my GPA be?

Students should maintain a 3.5 GPA to earn an academic scholarship.

What scores should I get on the SAT and ACT exams?

Students should get 1100 to 1200 on the SAT; students should get 23 to 25 on the ACT. Students can earn academic scholarships to most colleges and universities with these scores.

Students must be aware that it is very competitive to earn a scholarship to college.

What else can I do to improve my resume?

Students can join programs like the JETS program. JETS allows the students to learn from engineering professionals who can become their role models or mentors. By joining programs like JETS, students can get internships or do job shadowing. Students should get volunteer hours in community programs, libraries, etc., to place on their resumes.

Are there particular colleges/universities specializing in specific kinds of engineering?

Students should research the colleges and universities that they may want to pursue for STEM. Not all colleges offer every discipline of engineering. For example, not all colleges and universities have environmental engineering, petroleum engineering, geology, or hydrogeology programs. Students of color are encouraged to look into attending historically Black colleges and universities (HBCUs).