



Mechanical Engineering Technician, Aerospace Engineering, Electronic Engineering, Civil Engineering

Cluster Overview: Planning, managing, and providing scientific research and professional and technical services including laboratory and testing services, and research and development services.

Student Name _____

Entered 9th grade: 20____ - 20____

ID _____ **Grade :** 9 10 11 12

Diploma Plan: RHSP DAP* MHSP TEXAS SCHOLAR

Note 1 : Health and technology Applications locally required Note 2: Entered 9th grade in 2010 - 2011 and thereafter must include Fine Arts

SUGGESTED COURSEWORK

EXTENDED LEARNING EXPERIENCES

| Middle School | 8th | HS Courses: | | | | | |
|------------------|--------------------------------|--|---|--|---|--|------------------------|
| High School | 9th | Core Courses: | English I / PAP Algebra I / Geometry / PAP Biology / PAP | World Geography / PAP Spanish I P. E. Fine Arts / Tech App (BIM) | Curricular Experiences: BEST Robotics, Inc. FIRST Robotics Competition Project Lead the Way Skills USA Technology Student Association The Infinity Project Career Learning Experiences: Career Preparation Job Shadowing Internship | Extracurricular Experiences: Destination ImagiNation High School Students United with NASA International Bridge Building Contest Marine Advanced Technology Education Center National Engineering Design Competition UIL Academic Competitions VEX Robotics Competition Service Learning Experiences: Campus Service Organizations Community Service Volunteer Peer Mentoring/Peer Tutoring | |
| | | Career-Related Electives: | Concepts of Engineering and Technology (BIM) | | | | |
| | 10th | Core Courses: | English II / PAP Geometry / Algebra II / PAP Chemistry / PAP IPC | World History / PAP Spanish II (BIM)Tech App / Fine Arts | | | Elective: Elective: |
| | | Career-Related Electives: | Concepts of Engineering and Technology or Engineering Design and Presentation | | | | |
| | 11th | Core Courses: | English III / AP Adv. Math IV Algebra II* /MMA/ Pre-Cal / PAP/ DC Physics*/AP PTI Chemistry / PAP | United States History / AP / DC Professional Communications / Comm Appl / Health Spanish III / DC | | | |
| | | Career-Related Electives: | Concepts of Engineering and Technology or Engineering Design and Presentation | | | | |
| | 12th | Core Courses: | English IV / AP / DC Algebra II/ Adv Math IV / Pre-Cal /PAP Calculus AP/ Math DC | Physics/AP /PTI Fourth Science: Government/ AP/ DC Economics / AP/ DC Electives: | Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses (Tech Prep), if possible. List those courses that count for college credit on your campus. | | |
| | | Career-Related Electives: | Aerospace I (SRD) | | | | |
| Postsecondary | On-the-Job Training | Central Services Technician Office Machine Repairer Survey Assistant | | | | Professional Associations: American Chemical Society American Institute of Aeronautics and Astronautics American Institute of Chemical Engineering American Society of Agricultural & Biological Engineers American Society of Civil Engineers American Society for Engineering Education American Society of Mechanical Engineers Electronics Technicians Association International Institute of Electrical and Electronic Engineers International Technology Education Association Mathematical Association of America National Academy of Engineering National Coalition for Electronics Education National Electronics Service Dealers Association Society of Automotive Engineers Society of Women Engineers | |
| | Certificates | AutoCAD Architecture AutoCAD | AutoCAD Civil 3D Autodesk Inventor | OSHA CareerSafe Revit Architecture | Career Options: Environmental Engineering Technician Mechanical & Electrical Designer Mechanical & Electrical Drafter | | |
| | Associate Degrees | Computer Science | Engineering | Engineering Technology | Career Options: Electronics Technician Civil Engineering Technician | | |
| Bachelor Degrees | Aerospace Chemical Civil | Computer Electrical Industrial | Manufacturing Mechanical Systems | Career Options: Engineering Technologist Engineer | | | |
| Graduate Degrees | Aerospace Chemical Civil | Computer Electrical Industrial | Manufacturing Mechanical Systems | Career Options: Corporate Engineering Medicine Analyst Administration and Management Engineering Technology | | | |

Students may select other elective courses for personal enrichment purposes.

This plan of study serves as a guide, along with other career planning materials, for pursuing a career path and is based on the most recent information as of 2010. All plans meet high school graduation requirements as well as college entrance requirements.