



Name Heather Cornelius
 Learner ID _____
 School/College/University Freeport High, Engineering

updated 12-23-13

Science, Technology, Engineering and Mathematics: Engineering and Technology
Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

This Career Pathway Plan of Study (based on the Engineering and Technology Pathway of the Science, Technology, Engineering and Mathematics Career Cluster) can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals.

*This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

| EDUCATION LEVELS | GRADE | English/ Language Arts | Math | Science | Social Studies/ Sciences | Other Required Courses Other Electives Recommended Electives Learner Activities | *Career and Technical Courses and/ or Degree Major Courses for Engineering and Technology Pathway | SAMPLE Occupations Relating to This Pathway |
|---|---|---|--|--|---|--|---|--|
| Interest Inventory Administered and Plan of Study Initiated for all Learners | | | | | | | | |
| SECONDARY | 9 | English 9 or English 9 H | Integrated Math 1 or Geometry H | Science Survey Biology 9 or Biology 9 H | World History or World History H | 9th: Health/PE Consumer Economics, PE/Safety (Drivers Ed) 11th: PE and up to 2 Electives 12th: PE and up to 5 electives | Introduction to Design Drafting, Orientation to Technology (OTC) Advanced Drafting (CAD II), Introduction to Auto Technology, Independent Study Auto Technology Independent Study (CADIII), Welding & Print Reading (CareerTEC) Independent Study with Work Experience (CADIV) | <ul style="list-style-type: none"> ► Aeronautical Engineer ► Aerospace Engineer ► Agricultural Engineer ► Agricultural Technician ► Application Engineer ► Architectural Engineer ► Automotive Engineer ► Biomedical Engineer ► Biotechnology Engineer ► CAD Technician ► Chemical Engineer ► Civil Engineer ► Communications Engineer ► Computer Engineer ► Computer Programmer ► Construction Engineer ► Electrical Engineer ► Electronics Technician ► Geothermal Engineer ► Industrial Engineer ► Manufacturing Engineer ► Manufacturing Technician ► Marine Engineer ► Mechanical Engineer ► Metallurgist ► Mining Engineer ► Nuclear Engineer ► Petroleum Engineer ► Product/Process Engineer ► Survey Technician ► Systems Engineer ► Transportation Engineer |
| | 10 | English 10 or English 10 H | Integrated Math II or Algebra II | Biology, Chemistry or Chemistry H | Government or Government H, | | | |
| | 11 | English 11 or English 11 H, AP Language | Integrated Math 3, Math Application 1, Pre Calculus, | Chemistry, Physics, A&P, Forensic Science, | US History or US History H, AP US History | | | |
| | College Placement Assessments-Academic/Career Advisement Provided | | | | | | | |
| | 12 | English 12, AP Literature | | | | | | |
| Articulation/Dual Credit Transcribed-Postsecondary courses may be taken/moved to the secondary level for articulation/dual credit purposes. | | | | | | | | |
| POSTSECONDARY | Year 13 | Rhet/Comp I Rhet/Comp II | Analytic Geom/Calc I Analytic | Chemistry Physics I | 1 Social Behaviorial Science Elective | Year 13: 2nd Semester - 1 Humanities/Fine Arts, Year 14: 1st Semester 1 Humanities/Fine Arts, 1 Humanities | Introduction to Engineering (3) 1-2 Engineering Specialty Electives (4/5) • Continue Courses in the Area of Specialization • Complete Engineering Major (4-Year Degree Program) | |
| | Year 14 | Fundamentals Speech | Differential Equations, Analytic | Physics II | 1 Social Behaviorial Science Elective | | | |
| | Year 15 | | | | | | | |
| | Year 16 | | | | | | | |