



SD Program of Study

Engineering & Technology Pathway

This plan of study should serve as a guide, along with other career planning materials, as you continue your career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. All plans should meet high school graduation requirements as well as college entrance requirements.

	GRADE	English	Math	Science	Social Studies/ Sciences	SD Required Electives	Career & Technical Education Courses	SAMPLE Career Options Relating to This Pathway		
Interest Inventory Administered and Plan of Study Initiated for all Students										
SECONDARY	9	* English I	* Algebra I	* Physical Science	* World History * Geography	* PE/Health * Fine Art Elective	Introduction to Technical Education Electronics	<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 		
	10	* English II	* Geometry	* Biology I		2 units total - any combination of: * World Language or	Introduction to Energy & Power Mechatronics/Robotics			
	Academic/Career Advisement Provided - College Placement Assessments									
	11	* English III	Algebra II	Physics	* American History	* Computer Studies or Approved Career & Technical Education	Alternative Energy Systems Introduction to Engineering			
	12	* English IV	Trigonometry * AP Calculus or <u>College Credit Math</u>	* AP Chemistry	* U.S. Government * Psychology	* Personal Finance or * Economics	Engineering Design & Development Capstone Experiences			
The general course identified in this Program of Study are those required as part of S.D. Advanced Pathway to Graduation.										
POSTSECONDARY	Year 13	Written and Oral Communications	College Level Math	Natural Sciences	Social Studies/ Sciences	Computer Literacy				
	Year 14	Written Communications	Information Literacy			Wellness for Life Arts & Humanities				
	Year 15									
	Year 16									
<p> ◀ Blue Text - College Level - Dual Credit † Red Text - Courses can be articulated to Postsecondary Education Underlined Text - Industry Certification Available * Classes available through Virtual School ✦ Recommended academic </p>										