



### Career and Technical Education Instructional Program Information

<b>Program Name: Engineering Sciences</b>	<b>Program CIP Code: 15.0000.00</b>
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**Description:** The **Engineering Sciences** program is designed to develop student’s understanding of engineering problem solving and design practices. The program will prepare students to apply fundamental scientific and mathematical laws and principles relevant to engineering and technology. Students will learn to use systems of measurement, apply engineering technologies and tools as well as learn about the different disciplines and opportunities within the field of engineering. The program is designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, supervised occupational experience and leadership and personal development through the Career and Technical Student Organization, SkillsUSA.

**GPS Comprehensive High School Sites Offering the Instructional Program:**

Campo Verde HS	Desert Ridge HS	Gilbert HS	Highland HS	Mesquite HS
N/A	Yes	N/A	N/A	Yes

**Program Technical Standards and Measurement Criteria:**

<http://www.azed.gov/cte/es/>

**Program Information:**

Career and Technical Student Organization Affiliation	Carnegie Units Required (Number of Credits to Complete Program)	Non-Traditional Designation (Gender comprise less than 25% of the individuals employed in the workforce.)
<a href="#">SkillsUSA</a>	3	Female

**Course Offerings:**

Sequence of Instruction	Course Code (CIP)	Gilbert Schools Course Title
1	15.0000.10	SC200 INTRODUCTION TO ENGINEERING AND DESIGN
2	15.0000.20	SC201 PRINCIPLES OF ENGINEERING
3 (DRHS Only)	15.0000.30	SC202W DIGITAL ELECTRONICS
3 (MHS Only)	15.0000.30	SC204W AEROSPACE ENGINEERING or SC205W COMPUTER INTEGRATED MANUFACTURING
4	15.0000.40	SC203W ENGINEERING DESIGN AND DEVELOPMENT/CIM

Student Industry Certification(s):	
Certification Title	Link to Certification Information
Autodesk Certified User-Inventor	<a href="http://www.autodesk.com/education/prepare-and-inspire/certification">http://www.autodesk.com/education/prepare-and-inspire/certification</a>
Certified SolidWorks Associate (CSWA) (A-F CCRI eligible)	<a href="http://www.solidworks.com/sw/education/cswa-academic-exam.htm">http://www.solidworks.com/sw/education/cswa-academic-exam.htm</a>

Teacher Certification(s) Requirements:	
Certification Title	Link to Certification Information
Technical Education Industrial Technology - OR Technical Education Industrial and Emerging Technologies	<a href="http://www.azed.gov/educator-certification/forms-and-information/certificates/">http://www.azed.gov/educator-certification/forms-and-information/certificates/</a>