



Cluster:

Engineering and Architecture

Guided
Career Pathways

Architectural & Structural
Engineering / Engineering Design

Program of Study:

Engineering Electro/Mechanical Design (Proposed New Name:
Engineering Graphics and Computer Aided Design)

Associate of Arts/ Science Degree	M E T	I P	N E E D
2. AMERICAN INSTITUTIONS/STATE & LOCAL GOVERNMENT : (3 units)			
Political Science 101**, 105 and 106; Social Science 132. <small>(**Students who completed POL S 101 before Spring 2014 must also complete POL S 106).</small>			
3. U.S. HISTORY: (3units)			
Economics 111, History 116; History 110, 111(CD), 117, 118; Social Science 131			
4. MATHEMATICS			
Mathematics 101, 120, 131 or 220AB (2 units)			
5. HEALTH (3 units)			
Health 104, 106; Psychology 111(CD)* or equivalent will satisfy this requirement.			
6. PHYSICAL EDUCATION (2 units)			
physical education activity classes and/or dance activity classes			
7. FIRST AID (1 units)			
Health 101, 102; Emergency Medical Technology 140			
8. CULTURAL DIVERSITY (3 units)			
Courses that satisfy this requirement have been marked by (CD) and appear throughout the graduation requirements. The requirement may be satisfied by completing any one of the graduation requirements with a course marked (CD) or by completing Child Development 156.			
9. General Education: 18 units; 1 course from each areas			
A. Natural Science (3 units)			
B. Social Sciences (3 units)			
C. Humanities:			
1. Interdisciplinary Humanities (3 units)			
2. Arts, Foreign Language, Literature, & Philosophy (3 units)			
D. Lang & Reality:			
1.English Composition (3 units)			
2.Communication & Analytical Thinking (3 units)			
TOTAL UNITS 35-37			

PREREQUISITE COURSES	CERTIFICATE (Requirements)	U N I T S	M E T	I P	N E E D	Transfer Credit
	ENGR 100: Introduction to Engineering	3				CSU, UC, USC
	ENGR 101: Engineering Drafting and Basic Design	3				CSU, UC
	ENGR 102: Print Reading for Industry	3				CSU
ARCH 101 or ENGR 101 or equivalent	ENGR 109: Basic AutoCAD Applications	3				CSU, UC
ENGR 109	ENGR 110 Advanced AutoCAD Applications	3				CSU, UC, USC
ARCH 101 or ENGR 101 or equivalent	ENGR 111 SolidWorks Applications	3				CSU
ENGR 111	ENGR 112 Advanced SolidWorks Applications	3				CSU
TOTAL UNITS REQUIRED 21						

Student/Faculty Notes:

Online Resources



www.salarysurfer.cccco.edu



WWW.CaCareerZone.org



1500 North Verdugo Road, Glendale, CA 91208 [Academic Counseling](#) (818) 240-1000 Ext. 5918 [Career Center](#) (818) 240-1000 Ext. 5407 or 5408

SEE A COUNSELOR TO PREPARE A STUDENT EDUCATIONAL PLAN

Checklist

Revised 9/12/16



Engineering and Design

Whether you want to help design computer chips that make machines run faster or help create water treatment plants that slow down pollution, this pathway can lead you to a dream career.

You'll have a choice of five different programs on this pathway: Architectural and Structural Engineering; Computer Hardware, Electrical and Network Engineering; Engineering Design; Engineering Technology; and Environmental and Natural Science Engineering. No matter which you choose, you'll get the technical education and the hands-on experience you'll need to help create the world of tomorrow.



Engineering and Design

The blueprint for a great career.

Surveyors \$29.80 - \$41.70

Civil Engineering Technicians \$23.61 - \$34.62

Engineering Technicians \$21.25 - \$37.34

Surveying and Mapping Technicians \$20.71 - \$33.44

Architectural and Civil Drafters \$20.12 - \$31.39

Industrial Engineering Technicians \$19.31 - \$31.72

Source:
www.WhoDoUWant2b.com



How much can you make?



Technical Level Careers

(with AA or AS degree or certificate)

- Plan Checker
- Surveyor
- Estimator
- Electrical Engineering Technician
- Mechanical Engineering Technician
- Laboratory Technician
- Civil Engineering Technician
- Chemical Engineering Technician
- Aerospace Engineering Technician

Professional Level Careers

(with BS or BA degree)

- Mechanical Engineer
- Aerospace Engineer
- Agricultural Engineer
- Electrical Engineer
- Computer Hardware Engineer
- Telecommunications Engineer
- Landscape Architect
- Materials Engineer
- Industrial Designer
- Civil Engineer
- Structural Engineer

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