



Fresno City College

ENGINEERING
2023-2024

Name: _____

ID: _____

Date: _____

Counselor Contact: _____

A grade of "C" or better is required in the following courses

ASSOCIATE IN SCIENCE	C-ID	Units	Completed	In Progress	Planned
Required Core (26 units)					
ENGR 5, Programming and Problem Solving in MATLAB	ENGR 220	3			
ENGR 10, Introduction to Engineering	ENGR 110	2			
MATH 5A, Mathematical Analysis I	MATH 210	5			
MATH 5B, Mathematical Analysis II	MATH 220	4			
MATH 6, Mathematical Analysis III	MATH 230	4			
PHYS 4A, Physics for Scientists and Engineers	PHYS 205	4			
PHYS 4B, Physics for Scientists and Engineers	PHYS 210	4			
Engineering- Civil AS (F.3011. AS) Select a minimum of 4 courses (14-18 units)					
CHEM 1A, General Chemistry I	CHEM 110	5			
ENGR 1A, Elementary Plane Surveying 1	ENGR 180	4			
ENGR 2, Graphics	ENGR 150	4			
ENGR 4, Engineering Materials	ENGR 140	3			
ENGR 8, Statics	ENGR 130	3			
GEOL 1, Physical Geology	GEOL 101	4			
MATH 7, Introduction to Differential Equations OR MATH 17, Differential Equations and Linear Algebra	MATH 240	4-5			
PHYS 4C, Physics for Scientists and Engineers	PHYS 215	4			
Engineering- Computer (F.3015.AS) Select a minimum of 4 courses (16-17 units)					
CSCI 40, Programming Concepts & Methodology I	COMP 122	4			
CSCI 41, Programming Concepts & Methodology II	COMP 122	4			
ENGR 6, Circuits with Lab	ENGR 260	4			
ENGR 12, Digital Logic Design		4			
MATH 7, Introduction to Differential Equations OR	MATH 240	4-5			

MATH 17, Differential Equations and Linear Algebra					
PHYS 4C, Physics for Scientists and Engineers	PHYS 215	4			
Engineering: Electrical, AS (F.3013.AS) Select a minimum of 4 courses (16-18 units)					
CHEM 1A, General Chemistry I	CHEM 110	5			
ENGR 6, Circuits with Lab	ENGR 260	4			
ENGR 12, Digital Logic Design		4			
CSCI 40, Programming Concepts & Methodology I	COMP 122	4			
MATH 7, Introduction to Differential Equations OR MATH 17, Differential Equations and Linear Algebra	MATH 240	4-5			
PHYS 4C, Physics for Scientists and Engineers	PHYS 215	4			
Engineering: Mechanical, Aerospace, and Manufacturing, AS (F.3014.AS) Select a minimum of 4 courses (13-18)					
CHEM 1A, General Chemistry I	CHEM 110	5			
ENGR 2, Graphics	ENGR 150	4			
ENGR 4, Engineering Materials	ENGR 140	3			
ENGR 6, Circuits with Lab	ENGR 260	4			
ENGR 8, Statics	ENGR 130	3			
ENGR 11, Manufacturing Processes		3			
MATH 7, Introduction to Differential Equations OR MATH 17, Differential Equations and Linear Algebra	MATH 240	4-5			
PHYS 4C, Physics for Scientists and Engineers	PHYS 215	4			

Notes:

1. These degree programs are designed as basic coursework necessary for pursuing a career in the field of civil engineering, computer-software engineering, electrical engineering, and mechanical, aerospace, and manufacturing engineering. Students will be prepared for engineering internship opportunities and transferring to four-year engineering programs.
2. Some of the above courses may have prerequisites. See the catalog or schedule of classes.
3. The *Associate Degree* requires completion of the major (40-44 units) for Civil Engineering; (42-43 units) for Computer-Engineering; (42-44 units) for Electrical Engineering; (39-44 units) for Mechanical, Aerospace, and Manufacturing, AS with a "C" or better grade in each course. Students must complete one of the three different general education patterns: option 1 – Fresno City College General Education, option 2 – CSU GE Breadth–California State University General Education, OR option 3 – IGETC – Intersegmental General Education Transfer Curriculum for a total of **60 semester units minimum** with a 2.0 or better GPA.
4. Some courses may not have an associated C-ID, please see catalog or counselor for more information.