ENGINEERING

This program prepares students for transfer into an Engineering baccalaureate program by providing foundational training in core courses across the discipline.

Learning Outcomes: Upon successful completion of the program, students will be able to:

- Use the scientific method to investigate phenomena in the natural world and use concepts, experiments, and/or theory to explain them.
- Use the engineering method to solve technical problems or create products or processes.
- Analyze and evaluate complex issues or problems, draw reasoned conclusions and/or generate solutions, and effectively communicate their results.

Associate in Arts Degree (Transfer Preparation)

Associate Degree Major Requirements		**Units**
REQUIRED CORE:		
Select at least 18 units from the following:		**18**
CHEM 1A	General Chemistry I (5)	
CHEM 1B	General Chemistry II (5)	
MATH 20A	Calculus with Analytic Geometry I (5)	
MATH 20B	Calculus with Analytic Geometry II (5)	
MATH 20C	Calculus of Several Variables (5)	
MATH 31	Linear Algebra (4)	
MATH 32	Differential Equations (4)	
PHYS 3A	Science and Engineering Physics I (4)	
PHYS 3B	Science and Engineering Physics II (4)	
PHYS 3C	Science and Engineering Physics III (4)	
Select at least 7 units from the following:		**7**
ENGR 1A	Introduction to Engineering (3)	
ENGR 2	Engineering Design Graphics (3)	
ENGR 4	Engineering Materials (4)	
ENGR 8	Engineering Statics (3)	
ENGR 12	Engineering Circuits (3)	
ENGR 12L	Engineering Circuits Lab (1)	
ENGR 17	Technical Computing with MATLAB (3)	
TOTAL MAJOR UNITS		**25**
Associate Degree Requirements (as described above)		**25**

Contact an MPC counselor for major preparation at specific institutions.

Complete Competency Requirements, and CSU General Education or IGETC Pattern, for a total of 60 transferable units (see pages 72-75 in the 2017-18 MPC Catalog).

TOTAL DEGREE UNITS	**60**