Engineering – Career Studies Certificate (221-831-01)

Purpose Engineers are the planners and designers of the technological systems that are the backbone of our modern society. They apply principles of science and mathematics to meet the needs or solve the problems of humankind. These problems typically are multifaceted and involve the interplay of technological, economic, environmental, sociological, and political components.

Occupational Objectives The Career Studies Certificate in Engineering is designed for persons want to explore engineering as a potential major. This program allows students to experience the exciting opportunities in engineering and prepare themselves for an associate of science degree in engineering, which is transferable to a four-year college or university to complete a baccalaureate degree.

Admission Requirements Applicants must meet the general requirements for admission to the college. To be successful in this program, students must have demonstrated Math competency to be placed into pre-calculus with trigonometry (or equivalent). Students not achieving this level will be required to take developmental courses.

Program Requirements If a student is interested in completing the entire first year of the Engineering transfer degree, please refer to the Engineering Associate of Science degree for the additional courses to compliment those listed in this career studies (i.e. ENG 111, etc.). Applicants must also meet the ability to benefit requirements.

Curriculum and Other Requirements

		Credits
EGR 120**	Introduction to Engineering	2
EGR 124**	Introduction to Engineering and Engineering Methods	3
EGR 126**	Computer Programming for Engineers [C++]	3
EGR 140*	Engineering Mechanics–Statics	3
EGR 206**	Engineering Economy	3
MTH 166*	Pre-Calculus with Trigonometry	5
MTH 175*	Calculus of One Variable I	3
MTH 176*	Calculus of One Variable II	3
MTH 177*	Introductory Linear Algebra	2
MTH 178*	Topics in Analytic Geometry	2
Total Minimum Credits for Degree		**29**

* This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.

**This course has a co-requisite. Co-requisites for all courses are listed in the course description section at the back of the catalog.

Suggested Course Sequence

Fall	**Spring**
EGR 206	EGR 124
MTH 166	MTH 175
	MTH 177

Fall	**Spring**
EGR 120	EGR 126
MTH 176	EGR 140
MTH 178	