ENGR 770 Course Outline as of Fall 2022

CATALOG INFORMATION

Dept and Nbr: ENGR 770   Title: SUPPLEMENTAL ENGINEERING
Full Title: Supplemental Instruction: Engineering and Applied Technology
Last Reviewed: 10/11/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total		
Maximum	0	Lecture Scheduled	0	17.5	Lecture Scheduled		0
Minimum	0	Lab Scheduled	0	2	Lab Scheduled		0
		Contact DHR	4.00		Contact DHR		70.00
		Contact Total	4.00		Contact Total		70.00
		Non-contact DHR	0		Non-contact DHR		0

Total Out of Class Hours: 0.00   Total Student Learning Hours: 70.00

Title 5 Category: Non-Credit
Grading: Non-Credit Course
Repeatability: 27 - Exempt From Repeat Provisions
Also Listed As:
Formerly:

Catalog Description:
An open-entry, open-exit class for students who seek to expand upon their knowledge and skills in engineering related disciplines through technology projects, training, workshops, and presentations. Students will build on the skills developed in referring course(s) in the disciplines: Engineering, Electronics, Photovoltaic Technology, Civil Engineering Technology, Survey Technology, Geospatial Technology, Applied Technology, Water Treatment, Wastewater Treatment, Architecture, and Construction Management. Students will build on the skills developed in ENGR 6 – 103, ELEC 51A – 184, RENRG 101 - 157, CEST 51 - 192, SURV 53 – 60, GIS 40 – 56, APTECH 43 – 191, WTR 101 – 111, WWTR 112 – 125, ARCH 2.1 – 65, CONS 50 – 183.

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:

Description: An open-entry, open-exit class for students who seek to expand upon their knowledge and skills in engineering related disciplines through technology projects, training, workshops, and presentations. Students will build on the skills developed in referring course(s) in the disciplines: Engineering, Electronics, Photovoltaic Technology, Civil Engineering Technology, Survey Technology, Geospatial Technology, Applied Technology, Water Treatment, Wastewater Treatment, Architecture, and Construction Management. Students will build on the skills developed in ENGR 6 – 103, ELEC 51A – 184, RENRG 101 - 157, CEST 51 - 192, SURV 53 – 60, GIS 40 – 56, APTECH 43 – 191, WTR 101 – 111, WWTR 112 – 125, ARCH 2.1 – 65, CONS 50 – 183. (Non-Credit Course)
Prerequisites/Corequisites:
Recommended:
Limits on Enrollment:
Transfer Credit:
Repeatability: Exempt From Repeat Provisions

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**		Effective:	Inactive:
CSU GE:	**Transfer Area**		Effective:	Inactive:
IGETC:	**Transfer Area**		Effective:	Inactive:
CSU Transfer:		Effective:	Inactive:	
UC Transfer:		Effective:	Inactive:	

CID:

Certificate/Major Applicable:
Not Certificate/Major Applicable

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Demonstrate increased skill and knowledge in engineering and applied technology courses for which the students sought assistance.

Objectives:
At the conclusion of this course, the student should be able to:
1. Effectively utilize computer software and the internet to research, analyze, and solve problems related to their engineering and applied technology coursework.
2. Use computer software to produce design solutions and generate reports and documents related to their engineering and applied technology coursework.
3. Utilize manufacturing tools and test equipment to implement designs related to their engineering and applied technology coursework.

Topics and Scope:

Topics may include:
I. Concepts and Applications from the Referring Courses

II. Computer-Aided Design and Other Software Tools Related to Engineering and Applied Technology
III. Manufacturing Tools Related to the Above Disciplines
IV. Test and Measurement Equipment Related to the Above Disciplines
V. Career Development Strategies Related to the Above Disciplines

Assignment:

Student assignments will vary and include, but are not limited to:
1. Supplemental work from instructors in engineering and applied technology courses.
2. Software or equipment tutorials.
3. Individual or group design projects.
4. Individual or group research projects.
5. Career related investigations and activities.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None	Problem solving 0 - 0%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None	Skill Demonstrations 0 - 0%

Exams: All forms of formal testing, other than skill performance exams.

None	Exams 0 - 0%

Other: Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation in activities. Improved skills and knowledge related to referring course.	Other Category 100 - 100%

Representative Textbooks and Materials:
Textbook and materials from the referring classes
Instructor-prepared materials