ENGR 49 Course Outline as of Fall 2022

CATALOG INFORMATION

Dept and Nbr: ENGR 49 Title: INDEPENDENT STUDY
Full Title: Independent Study in Engineering
Last Reviewed: 2/28/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	0	17.5	Lecture Scheduled	0
Minimum	1.00	Lab Scheduled	0	3	Lab Scheduled	0
		Contact DHR	1.00		Contact DHR	17.50
		Contact Total	1.00		Contact Total	17.50
		Non-contact DHR	8.00		Non-contact DHR	140.00

Total Out of Class Hours: 0.00 Total Student Learning Hours: 157.50

Title 5 Category:	AA Degree Applicable
Grading:	Grade Only
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	

Catalog Description:
Independent study or project in engineering to provide for an enriched academic experience. UC determines credit after transfer; not counted for admission. (See a counselor for details.)

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:
Approval of the project proposal by sponsoring faculty, Department Chair and Supervising Administrator.

Schedule of Classes Information:
Description: Independent study or project in engineering to provide for an enriched academic experience. UC determines credit after transfer; not counted for admission. (See a counselor for details.) (Grade Only)
Prerequisites/Corequisites:
Recommended:
Limits on Enrollment: Approval of the project proposal by sponsoring faculty, Department Chair

and Supervising Administrator.
Transfer Credit: CSU;UC.
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

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

CSU Transfer:	Transferable	Effective:	Fall 1981	Inactive:
UC Transfer:	Transferable	Effective:	Fall 1981	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. Expand upon their foundational knowledge and skills through independent study or projects.

Objectives:
At the conclusion of this course, the student should be able to:
1. Find relevant resources for investigating, developing, and completing engineering projects.
2. Document their knowledge of the sub-topics or components of the study topic or project.
3. Achieve the objectives outlined in the special studies application.

Topics and Scope:

The course content will focus on either directed research on engineering topics or the design and construction of an engineering related project.
Content will vary depending on student interest and instructor availability. Typically, the course involves a project requiring a design phase, a construction and testing phase, and a demonstration phase.

Assignment:

Course will typically include the construction and presentation of an engineering related project with related design documentation. Assignments will be outlined in the independent studies application.

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.

Related design documentation	Writing 1 - 100%

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

Construction of an engineering related project	Problem solving 0 - 99%

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

Presentation of an engineering topic or project.	Skill Demonstrations 0 - 50%

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.

None	Other Category 0 - 0%

Representative Textbooks and Materials:
Written resources will vary with project content.