

ENGR 49 Course Outline as of Fall 2013**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 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 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: |
|---------------|----------------------|------------|-----------|

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|----------------------|--------------|------------|-----------|-----------|
| CSU Transfer: | Transferable | Effective: | Fall 1981 | Inactive: |
|----------------------|--------------|------------|-----------|-----------|

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|---------------------|--------------|------------|-----------|-----------|
| UC Transfer: | Transferable | Effective: | Fall 1981 | Inactive: |
|---------------------|--------------|------------|-----------|-----------|

CID:

Certificate/Major Applicable:

Not Certificate/Major Applicable

COURSE CONTENT

Outcomes and Objectives:

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 special 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.

| |
|----------------|
| Written Report |
|----------------|

| |
|---------------------|
| Writing 1 - 100% |
|---------------------|

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

Constructed engineering design project

Problem solving
0 - 99%

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.

None

Other Category
0 - 0%

Representative Textbooks and Materials:

Written resources will vary with project content.