

ENGR 49 Course Outline as of Fall 2017**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:
CSU Transfer:	Transferable	Effective: Fall 1981	Inactive:
UC Transfer:	Transferable	Effective: Fall 1981	Inactive:

CID:

Certificate/Major Applicable:

Not Certificate/Major Applicable

Approval and Dates

Version:	05	Course Created/Approved:	11/15/1991
Version Created:	11/6/2015	Course Last Modified:	6/4/2022
Submitter:	V. Bertsch	Course last full review:	2/28/2022
Version Status:	Approved (Changed Course)	Prereq Created/Approved:	2/28/2022
Version Status Date:	12/14/2015	Semester Last Taught:	Spring 2022
Version Term Effective:	Fall 2017	Term Inactive:	Fall 2022

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 projects.

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 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.

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.

OTHER REQUIRED ELEMENTS

STUDENT PREPARATION

Matric Assessment Required:	X	Exempt From Assessment
Prerequisites-generate description:	NP	No Prerequisite
Advisories-generate description:	NA	No Advisory
Prereq-provisional:	N	NO
Prereq/coreq-registration check:	N	No Prerequisite Rules Exist
Requires instructor signature:	Y	Instructor's Signature Required

BASIC INFORMATION, HOURS/UNITS & REPEATABILITY

Method of instruction:	40	Directed Study
	72	Internet-Based, Delayed Interaction
	71	Internet-Based, Simultaneous Interaction
Area department:	ENGR	Engineering and Applied Technology
Division:	73	Science, Technology, Engineering & Mathematics
Special topic course:	N	Not a Special Topic Course
Program status:	2	Not Certificate/Major Applicable
Repeatability:	00	Two Repeats if Grade was D, F, NC, or NP
Repeat group id:	49/98	Independent Study 49/98

SCHEDULING

Audit allowed:	N	Not Auditable
Open entry/exit:	N	Not Open Entry/Open Exit
Credit by exam:	N	Credit by examination not allowed
Budget code: Program:	0000	Unrestricted
Budget code: Activity:	0901	Engineering

OTHER CODES

Discipline:	Engineering OR Engineering Support	
Basic skills:	N	Not a Basic Skills Course
Level below transfer:	Y	Not Applicable
CVU/CVC status:	Y	Distance Ed, Not CVU/CVC Developed
Distance Ed Approved:	N	None
Emergency Distance Ed Approved:	Y	Fully Online Partially Online Online with flexible in-person activities
Credit for Prior Learning:	N	Agency Exam
	N	CBE
	N	Industry Credentials
	N	Portfolio
Non-credit category:	Y	Not Applicable, Credit Course
Classification:	Y	Liberal Arts and Sciences Courses
SAM classification:	E	Non-Occupational
TOP code:	0901.00	Engineering, General
Work-based learning:	N	Does Not Include Work-Based Learning
DSPS course:	N	Not a DSPS Course

In-service:

N

Not an in-Service Course