ENGR50: Engineering Internship

General Information

Author: • Christopher Herwerth

Course Code (CB01): ENGR50

Course Title (CB02): Engineering Internship

Department: ENGR

Proposal Start: Spring 2025

TOP Code (CB03): (0924.00) Engineering Technology, General (requires Trigonometry)

CIP Code: (15.0000) Engineering Technologies/Technicians, General.

SAM Code (CB09): Clearly Occupational

Distance Education Approved: No
Will this course be taught No

asynchronously?:

y?:

Course Control Number (CB00): CCC000502207

Curriculum Committee Approval Date: 05/22/2024

Board of Trustees Approval Date: 07/16/2024

Last Cyclical Review Date: 05/22/2024

Course Description and Course Note: ENGR 50 is a discipline-specific course which allows students to earn from 1-3 units for

structured, supervised work on-campus or off-campus in the field of engineering under the supervision of a faculty advisor. It is designed to provide students with hands-on, discipline-linked work experience that will extend their knowledge and understanding of career demands in engineering. Note: This course is Pass/No Pass only. Note: This course may be taken four times; a maximum of 12 units may be earned. Students must arrange an

approved internship prior to enrolling in this class.

Justification: Mandatory Revision

Academic Career: • Credit

Mode of Delivery:

Author:

Course Family:

Academic Senate Discipline

Primary Discipline: • Engineering

Alternate Discipline:

• Engineering Technology

Alternate Discipline:

• Engineering Support (Surveying, engineering aides)

Basic Skill Status (CB08) Course Special Class Status (CB13) Course is not a basic skills course. Course is not a special class. Course is not a special class. Pass / No-Pass Only Pre-Collegiate Level (CB21) Course Support Course Status (CB26) Not applicable. Course is not a support course Course is not a support course

General Education and C-ID General Education Status (CB25) Not Applicable Transferability Transferability Status Transferable to CSU only Approved

Transferability			Transferability Sta	atus
Transferable to CSU only			Approved	
Units and Hours				
Summary				
Minimum Credit Units (CB07)	1			
Maximum Credit Units (CB06)	3			
Total Course In-Class	54 -			
(Contact) Hours	162			
Total Course Out-of-Class Hours	0 - 0			
Total Student Learning	54 -			
Hours	162			
Credit / Non-Credit Op	tions			
Course Type (CB04)		Noncredit Course Co	ategory (CB22)	Noncredit Special Characteristics
Credit - Degree Applicable		Credit Course.		No Value
Course Classification Code (CB	11)	Funding Agency Cat	tegory (CB23)	Cooperative Work Experience
Credit Course.		Not Applicable.		Education Status (CB10)
Variable Credit Course				
Weekly Student Hours	;		Course Stude	ent Hours
In Clas	ss	Out of Class	Course Duration	n (Weeks) 18

Variable Credit Co	ourse			
Weekly Studen	nt Hours		Course Student Hours	
	In Class	Out of Class	Course Duration (Weeks)	18
Lecture Hours	0	0	Hours per unit divisor	54
Laboratory	3 - 9	0	Course In-Class (Contact) Ho	urs
Hours	0	0	Lecture	0
Studio Hours	0	0	Laboratory	54 - 162
			Studio	0

Lecture	0				
Laboratory	0				
Studio	0				
Total	0				
Time - Oitem	4 N - 4 f 0	Marida and a			
Time Commitm	ent Notes for S	itudents			
No value					
Units and Hour	s - Weekly Spe	cialty Hours			
Activity Name		Туре	In Class	Out of Class	
No Value		No Value	No Value	No Value	
Pre-requisites,	Co-requisites,	Anti-requisites ar	nd Advisories		
Advisom					
Advisory ESI 1/1 - Gram	mar And Writing	IV			
	mar / mar / vinting	V			
prompt introdu	t, (b)includes a clear th	nesis statement, (c) uses ex lusion, and (e) uses appro	vidence to support the the	appropriately a reading passag sis, (d) shows clear organizatio ch as comparison/contrast, cau	on into an
OR					
Advisory					
ENGL101 - Intro	oduction to Colle	ge Reading and Con	nposition		
	nalyze, and evaluate a , audience, and purpo		fiction readings for conten	t, context, and rhetorical merit	with consideration
Entry Standard	s				
Entry Standards					
Course Limitati	ions				

Total

Course Out-of-Class Hours

Cross Listed or Equivalent Course

54 - 162

Specifications

Methods of Instruction

Methods of Instruction Laboratory

Out of Class Assignments

- Journal (e.g. documentation of duties performed)
- Written assignments (e.g. research of industry-specific educational requirements)
- Final resume
- Final project (e.g. professional portfolio)

Methods of Evaluation	Rationale
Other	Internship facility supervisor's evaluation of student
Report	Reports (e.g. weekly reports of reflections on internship experiences)
Activity (answering journal prompt, group activity)	Student self-evaluation (e.g. self-assessment of internship performance)

Textbook Rationale

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
No Value	No Value	No Value	No Value	No Value

Other Instructional Materials (i.e. OER, handouts)

Description No required textbooks. Faculty advisor and staff at the host institution may assign readings

from discipline-specific sources.

Author No value
Citation No value
Online Resource(s) No value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

Analyze personal performance of specific skills related to the ta Compose a resume. SLOs Practice basic occupational competencies required for employ ENGR Civil Engineering Demonstrate introductory skills NLOs Core ILOs Demonstrate depth of knowledge theories, or methodologies to so Practice ethical and responsible recognize and welcome diverse being. ENGR Engineering Technology - CAD & Demonstrate skills in the product (CAD) software Discuss how the design process a finished product. ENGR Engineering Entrepreneurship Skill Award	Is and abilities) required for employment in the target career/discipline. Is and abilities) required for employment in the target career/discipline. In the target career/discipline. Expected Outcome Performance: 70.0 cs, science and engineering; identify, form and solve engineering problems using modern engineering tools necessary for engineering practice. In the target career/discipline. It is a solution to the target career/discipline to the target career/discipline. It is a solution to the target car			
Analyze personal performance of specific skills related to the ta Compose a resume. SLOs Practice basic occupational competencies required for employ ENGR Civil Engineering Apply knowledge of mathematic Demonstrate introductory skills ILOs Core ILOs Demonstrate depth of knowledge theories, or methodologies to so Practice ethical and responsible recognize and welcome diverse being. ENGR Engineering Technology - CAD & Demonstrate skills in the product (CAD) software Discuss how the design process a finished product. ENGR Engineering Entrepreneurship Skill Award Learn hands-on skills and problemanufacturing, testing, technical	rget career/discipline. Expected Outcome Performance: 70.0 cs, science and engineering; identify, form and solve engineering problems using modern engineering tools necessary for engineering practice. ge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, olve unique problems.			
Compose a resume. SLOs Practice basic occupational competencies required for employ ENGR Civil Engineering Apply knowledge of mathematic Demonstrate introductory skills Demonstrate depth of knowledge theories, or methodologies to some practice ethical and responsible recognize and welcome diverse being. ENGR Engineering Technology - CAD & Demonstrate skills in the product product of the	ment in the target career/discipline. Expected Outcome Performance: 70.0 cs, science and engineering; identify, form and solve engineering problems using modern engineering tools necessary for engineering practice. ge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, olve unique problems.			
SLOs Practice basic occupational competencies required for employ ENGR Civil Engineering Demonstrate introductory skills ILOS Core ILOS Demonstrate depth of knowledge theories, or methodologies to so practice ethical and responsible recognize and welcome diverse being. ENGR Engineering Technology - CAD & Demonstrate skills in the product period of the product of the produc	using modern engineering tools necessary for engineering practice. ge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, polve unique problems.			
Practice basic occupational competencies required for employ ENGR Civil Engineering Demonstrate introductory skills Demonstrate depth of knowledge theories, or methodologies to so a competencies. Practice ethical and responsible recognize and welcome diverse being. ENGR Engineering Technology - CAD & Demonstrate skills in the product (CAD) software Discuss how the design process a finished product. ENGR Engineering Entrepreneurship Skill Award Learn hands-on skills and problemanufacturing, testing, technical manufacturing, testing, tech	using modern engineering tools necessary for engineering practice. ge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, polve unique problems.			
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Civil Engineering Demonstrate introductory skills ILOs Core ILOs Demonstrate depth of knowledge theories, or methodologies to so Practice ethical and responsible recognize and welcome diverse being. ENGR Engineering Technology - CAD & Demonstrate skills in the product (CAD) software Discuss how the design process a finished product. ENGR Engineering Entrepreneurship Skill Award Demonstrate skills in the product (CAD) software Discuss how the design process a finished product.	using modern engineering tools necessary for engineering practice. ge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, olve unique problems.			
Demonstrate depth of knowledge theories, or methodologies to so theories, or methodologies to so practice ethical and responsible recognize and welcome diverse being. ENGR	ge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, olve unique problems.			
Core ILOs theories, or methodologies to so Practice ethical and responsible recognize and welcome diverse being. ENGR Engineering Technology - CAD & Demonstrate skills in the product Demonstrate techniques to accompany (CAD) software Discuss how the design process a finished product. ENGR Engineering Entrepreneurship Skill Award theories, or methodologies to so Practice ethical and responsible recognize and welcome diverse being. Demonstrate techniques to accompany to a finished product. Learn hands-on skills and problem manufacturing, testing, technical manufacturing, testing, technical manufacturing, testing, technical manufacturing.	olve unique problems.			
recognize and welcome diverse being. ENGR Engineering Technology - CAD & Demonstrate skills in the product Demonstrate techniques to accompany (CAD) software Discuss how the design process a finished product. ENGR Engineering Entrepreneurship Skill Award Demonstrate skills in the product of the produ	behavior within personal, academic, professional, social, and societal contexts;			
Engineering Technology - CAD & Design Drafting Demonstrate techniques to accompany (CAD) software Discuss how the design process a finished product. ENGR Engineering Entrepreneurship Skill Award Engineering Entrepreneurship	lifestyle choices that promote physical, intellectual, psychological, and social well-			
& Design Drafting Demonstrate techniques to accompany (CAD) software Discuss how the design process a finished product. ENGR Engineering Entrepreneurship Skill Award Demonstrate techniques to accompany to accompany the design process a finished product. Learn hands-on skills and problem manufacturing, testing, technical manufacturing, testing, testi	ction of working drawings of engineering structures			
a finished product. ENGR Engineering Entrepreneurship Skill Award Learn hands-on skills and proble manufacturing, testing, technical	Demonstrate techniques to accomplish drawings and 3D models utilizing different various computer aided design (CAD) software			
Engineering Entrepreneurship manufacturing, testing, technica Skill Award	Discuss how the design process and design/drawing techniques are used with other engineering processes to create a finished product.			
	em solving techniques for businesses related to engineering design, installation, all sales, maintenance, and other such topics in engineering technology.			
	Learn how the business skills of starting-up or managing their business in the engineering field.			
Learn the engineering design pr complex systems.	Learn the engineering design process and how technical products are made, assembled, and integrated into complex systems.			
	nd make appropriate decisions with the supervision of a licensed engineer;			
Electrical Engineering A.S. Degree Major demonstrate appropriate techni	demonstrate appropriate technical written, verbal, drawing, and communication skills;			
design a system, component, or	design a system, component, or process with supervision of a licensed engineer to meet desired needs.			
use science and mathematical sl	process with supervision of a licensed engineer to meet desired needs.			
work effectively on a team and e	process with supervision of a licensed engineer to meet desired needs.			

ENGR Computer Engineering AS	analyze engineering problems and make appropriate decisions with the supervision of a licensed engineer;
Computer Engineering A3	demonstrate appropriate technical written, verbal, drawing, and communication skills;
	design a system, component, or process with supervision of a licensed engineer to meet desired needs.
	use science and mathematical skills required for occupational needs;
	work effectively on a team and exercise initiative and function in a leadership role;
ENGR Mechanical Engineering - A.S. Degree Major	analyze engineering problems and make appropriate decisions with the supervision of a licensed engineer;
	demonstrate appropriate technical written, verbal, drawing, and communication skills;
	design a system, component, or process with supervision of a licensed engineering to meet desired needs.
	use science and mathematical skills required for occupational needs;
	work effectively on a team and exercise initiative and function in a leadership role;

Course Content

Lecture Content

No value

Laboratory/Studio Content

Internship (54 - 162 hours)

- On-the job shadowing of current employees
- Information gathering of current industry trends

Total Hours: 54-162

Additional Information

Is this course proposed for GCC Major or General Education Graduation requirement? If yes, indicate which requirement in the two areas provided below.

No

GCC Major Requirements

No Value

GCC General Education Graduation Requirements

No Value

Repeatability

Not Repeatable

Justification (if repeatable was chosen above)

No Value

Resources
Did you contact your departmental library liaison?
If yes, who is your departmental library liason? No Value
Did you contact the DEIA liaison? No
Were there any DEIA changes made to this outline? No Value
If yes, in what areas were these changes made: No Value
Will any additional resources be needed for this course? (Click all that apply) No Value
If additional resources are needed, add a brief description and cost in the box provided. No Value