



Mathematical, Information and Computer Sciences Department

School of STEM

## **EGR4092 Internship in Engineering**

2 Units

*Fall 2025*

**Meeting days/times: These will depend on your internship**

**Meeting location: These will depend on your internship**

**Final Exam: There is no exam in this class, you have a final paper.**

**Instructor Title and Name:** Dr. Maria Zack

**Phone:** 619-849-2458

**Email:** mzack@pointloma.edu

**Office Location and Office Hours:**

Below are the times that I work to hold open for office hours. If none of them work you can email me to see if we can find another time. I offer both in person (office RS246) and Google Meet options for office hours. [Use this link](#) to book an appointment if you want a time reserved for you or if you want to use Google Meet. You can also just stop by my office.

Mon 1:30-3:30

Tues 8:30-9:30

Tues 4:00-5:00

Wed 5:00-6:00

Thurs 8:00-9:00

Fri 10:30-12:00

### **PLNU Mission**

#### **To Teach ~ To Shape ~ To Send**

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

## Department Mission

The Department of Physics & Engineering provides strong programs of study that aid in ensuring our students are well prepared for both graduate studies and careers in a variety of scientific and engineering fields. We emphasize a collaborative learning environment that allows students to thrive academically, build personal confidence, and develop interpersonal skills, while providing a Christian setting for students to learn values and judgment and pursue integration of modern scientific knowledge and Christian faith.

## Course Description

EGR 4092 Internship in Engineering (2 Units)

A supervised experience in which the student works with industry professionals to gain experience in engineering. May be repeated up to a total of four (4) units. Credit/No Credit.

Prerequisite(s): Student must have taken at least two upper-division engineering or physics classes and consent of instructor.

## Program and Course Learning Outcomes

- ABET #1 Graduate of the program will demonstrate an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics (CC: CT)
- ABET #2 Graduate of the program will demonstrate an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- ABET #3 Graduate of the program will demonstrate an ability to communicate effectively with a range of audiences (CC: OC, WC, IL)
- ABET #4 Graduate of the program will demonstrate an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- ABET #7 Graduate of the program will demonstrate an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

In addition, an internship is an opportunity for students to:

- Apply skills and knowledge learned in major courses to real business situations.
- Reinforce and expand previous conceptual learning through work experience.
- Develop “networks” in the business and professional community.

The PLO assessed in this course: Students will understand the professional, ethical and social issues and responsibilities with the implementation and use of mathematical models and technology.

The signature assignment for this assessment: Ethics Exercise

## Required Texts and Recommended Study Resources

Students are responsible for having the required course textbooks prior to the first day of class.

All supplemental materials posted on this course site (including articles, book excerpts, or other documents) are provided for your personal academic use. These materials may be protected by copyright law and should not be duplicated or distributed without permission of the copyright owner.

There is no textbook for this class.

## Course Credit Hour Information

In the interest of providing sufficient time to accomplish the stated Course Learning Outcomes, this class meets the PLNU credit hour policy for a 2-unit class delivered over 15 weeks. It is anticipated that students will spend a minimum of 37.5 participation hours per credit hour on their coursework. For this course, students will spend an estimated 96 total hours meeting the course learning outcomes. The time estimations are provided in the Canvas modules. This breaks down as:

Work at the internship location (minimum required):	80 hours
Reading Assignments:	5 hours
Written Assignments:	10 hours
<u>Other Assignments and Learning Activities:</u>	<u>1 hour</u>
Total:	96 hours

## Assessment and Grading

### Graded Components

- **Academic Internship Contract:** You must complete an “Academic Internship Contract” and turn it in to me no later than midnight on Friday of the second week of classes. The form is attached. The person who is to supervise you at your internship workplace must sign as your on-site supervisor and I must sign as your department sponsor. Please be as precise as possible in specifying your duties as an intern and the skills you hope to develop. Your internship should not be considered valid for academic credit until I have approved and signed your completed contract.
- **Weekly Timesheets:** Each week you need to turn in your timesheet indicating the hours that you have worked and what you did during those hours. The timesheet must be signed by your supervisor. Each weekly report covers Monday through Saturday of that week and is due by Wednesday of the following week. You can find a link to the timesheet in the relevant assignment. Please upload you signed timesheet in Canvas.
- **Internship Evaluation Essay:** There are multiple steps in preparing this essay and a assignment related to each step. This brief paper asks you to reflect on the quality of your internship, what new things you learned and how the work connects with the coursework that you have

taken. This should include references to articles and books that you have read to gain technical knowledge for your internship.

- **Ethics Assignment:** There will be an assignment due at the end of the semester that will ask you to consider some of the ethical issues that you observed or encountered during your internship.
- **Examinations and the Final Examination.** There are no examinations in this class.
- **Late work will not be accepted** without prior consent or a well-documented emergency.

### Grade Distribution

Contract Documents	5%
Time Sheets	35%
Paper Outline	10%
Paper Draft	10%
Final Paper	30%
<u>Ethics Assignment</u>	<u>10%</u>
Total	100%

### Standard Grade Scale Based on Percentages

A	B	C	D	F
A [92.5-100]	B+ [87.5-90]	C+ [77.5-80]	D+ [67.5-70]	F [0-60]
A- [90-92.5]	B [82.5-87.5]	C [72.5-77.5]	D [62.5-67.5]	
	B- [80-82.5]	C- [70-72.5]	D- [60-62.5]	

### Final Examination Policy

Successful completion of this class requires taking the final examination on its scheduled day. The final examination schedule is posted on the [Traditional Undergraduate Records: Final Exam Schedules](#) site. If you find yourself scheduled for three (3) or more final examinations on the same day, you are authorized to contact each professor to arrange a different time for one of those exams. However, unless you have three (3) or more exams on the same day, no requests for alternative final examinations will be granted.

## **Incompletes and Late Assignments**

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be assigned in extremely unusual circumstances.

## **Artificial Intelligence (AI) Policy**

You are allowed to use Artificial Intelligence (AI) tools (e.g., ChatGPT, Gemini Pro 1.5, GrammarlyGo, Perplexity, etc) to generate ideas, but you are not allowed to use AI tools to generate content (text, video, audio, images) that will end up in any work submitted to be graded for this course. If you have any doubts about using AI, please gain permission from the instructor.

## **PLNU Academic Accommodations Policy**

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities in accordance with the Americans with Disabilities Act (ADA). Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center ([EAC@pointloma.edu](mailto:EAC@pointloma.edu) or 619-849-2533). Once a student's eligibility for an accommodation has been determined, the EAC will work with the student to create an Accommodation Plan (AP) that outlines allowed accommodations. Professors are able to view a student's approved accommodations through Accommodate.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course. Accommodations are not retroactive so clarifying with the professor at the outset is one of the best ways to promote positive academic outcomes.

Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC. Students cannot assume that because they had accommodations in the past, their eligibility at PLNU is automatic. All determinations at PLNU must go through the EAC process. This is to protect the privacy of students with disabilities who may not want to disclose this information and are not asking for any accommodations.

## **Additional Course Information**

Additional PLNU policies and practices that apply to this course can be found at the following link:  
<https://docs.google.com/document/d/11BgAANLOJ9tjt837d24EZ181ukM2qzHF/edit>

## Assignments At-A-Glance

Date	Details	Due
Fri Sep 5, 2025	Assignment <a href="#">Location Paperwork</a>	due by 5pm
Wed Sep 10, 2025	Assignment <a href="#">Contract Work</a>	due by 5pm
Wed Sep 10, 2025	Assignment <a href="#">Week 1 Time Sheet</a>	due by 11:59pm
Wed Sep 17, 2025	Assignment <a href="#">Week 2 Time Sheet</a>	due by 11:59pm
Wed Sep 24, 2025	Assignment <a href="#">Week 3 Time Sheet</a>	due by 11:59pm
Fri Sep 26, 2025	Assignment <a href="#">Schedule a Meeting To Discuss Reading</a>	due by 11:59pm
Wed Oct 1, 2025	Assignment <a href="#">Week 4 Time Sheet</a>	due by 11:59pm
Wed Oct 8, 2025	Assignment <a href="#">Week 5 Time Sheet</a>	due by 11:59pm

<b>Date</b>	<b>Details</b>	<b>Due</b>
Wed Oct 15, 2025	Assignment <a href="#">Week 6 Time Sheet</a>	due by 11:59pm
Wed Oct 22, 2025	Assignment <a href="#">Week 7 Time Sheet</a>	due by 11:59pm
Wed Oct 29, 2025	Assignment <a href="#">Week 8 Time Sheet</a>	due by 11:59pm
Sun Nov 2, 2025	Assignment <a href="#">Paper Outline</a>	due by 11:59pm
Wed Nov 5, 2025	Assignment <a href="#">Week 9 Time Sheet</a>	due by 11:59pm
Wed Nov 12, 2025	Assignment <a href="#">Week 10 Time Sheet</a>	due by 11:59pm
Fri Nov 14, 2025	Assignment <a href="#">Draft of Paper</a>	due by 11:59pm
Wed Nov 19, 2025	Assignment <a href="#">Week 11 Time Sheet</a>	due by 11:59pm
Wed Nov 26, 2025	Assignment <a href="#">Week 12 Time Sheet</a>	due by 11:59pm

<b>Date</b>	<b>Details</b>	<b>Due</b>
Wed Dec 3, 2025	Assignment <a href="#">Week 13 Time Sheet</a>	due by 11:59pm
Wed Dec 10, 2025	Assignment <a href="#">Week 14 Time Sheet</a>	due by 11:59pm
Sun Dec 14, 2025	Assignment <a href="#">Final Paper</a>	due by 11:59pm
	Assignment <a href="#">Ethics</a>	due by 11:59pm
Wed Dec 17, 2025	Assignment <a href="#">Week 15 Time Sheet</a>	due by 11:59pm