

LYLES SCHOOL OF CIVIL ENGINEERING

SOPHOMORE ORIENTATION, ADVISING & REGISTRATION

2024-25 Academic Year February 2024



Lyles School of Civil Engineering

Department Heads



Dr. Rao S. Govindaraju
Bowen Engineering Head
and Professor of Civil
Engineering



Dr. Ayhan Irfanoglu
Associate Head and
Professor of Civil
Engineering

ABOUT CIVIL

Approx 60 Faculty

9 Specialty Areas

- Architectural Engr
- Environmental
- Geotechnical
- Materials
- Transportation
- Construction
- Geomatics
- Hydraulics/Hydrology
- Structures
...and General

Meet Your Advisors



Marty Lah

Undergraduate Program Administrator

- Undergraduate Advisor
- Study Abroad liaison– semester or year long
 - Maymester (2-3 week) most popular
 - GEARE Program
 - Global Studies Minor

HAMP 1141F

496-2379

mlah@purdue.edu

Meet Your Advisors



Julie Jesiek

Lead Academic Advisor

- Plan of Study Approvals
- My Purdue plan exceptions
- CE Scholarships
 - Approximately 100 scholarships/year
 - Apply online at <http://eng.purdue.edu/CE/scholarship-app>

HAMP 1141D

496-2161

jjesiek@purdue.edu



Heather Philhower

Administrative Assistant
CE Main Office HAMP 1141

HAMP 1141

494-2166

hphilhow@purdue.edu

Program Administration Manager



Kathy Heath

- COOP Program
- Summer Internships
- Full-time Employment

HAMP 1141E

496-2157

heathk@purdue.edu

Join Co-op for the Win!

- As a co-op student, you will be given **quality assignments** that challenge you with increasing levels of difficulty with each work session.
- Be among the first to get **full-time job offers**, as most co-op positions lead to full-time offers upon graduation.
- Co-op students often receive **higher full-time salary offers** upon graduation than those who didn't participate!
- Offering more **Flexibility** than ever!
- As a co-op student, you will earn a **substantial salary** while acquiring your education!

Contact Kathy Heath for more information!

Hampton 1141 Phone (765) 494-2157 heathk@purdue.edu

Industry Opportunities & Career Placement

Employers are looking for you...create your account today!

- Full-time Employment
- Internship
- Co-op

<https://engineering.purdue.edu/CE/Careers/IndustryOpps>

Also Check out the CE Blog for job information and more:

<http://purduece.blogspot.com/>



Job Search

Query:

Job Type: Full-Time Internship Co-op

State:



Purdue
Engineering
Students
on the job

Overview

[If you are a student or employer interested in setting up an account, click here!](#)

- **Broadening your experiences** is an important step for any student in Civil Engineering, and gaining that experience through summer internships or full time employment can be one of the most rewarding ways.
- This site was created to **match students and potential** employers with opportunities that allow both to explore these experiences.
- Students can **post resumes**, view information about active companies with open positions, and sign-up, online, for on campus interviews conducted by these companies.
- Companies can then review student resumes and view active interview schedules and **set up on-campus interviews**.
- Take a few moments to [create an account](#) and explore the site. Editing your account can be done at any time through the account management section. If you have any questions about your account you can email ceindustryopps@ecn.purdue.edu at anytime.

Career Services

[Search Jobs](#)
[Search Employers](#)
[View New Employers](#)
[On Campus Interviews](#)
[CE Career Fair](#)
[Career Opportunities Requiring Experience](#)

Account Management

[Access My Account](#)
[Create an Account](#)
[Site Administration](#)

CE Blog: <http://purduece.blogspot.com/>



Purdue Lyles School of Civil Engineering Student Information and Updates

Search this blog

AECOM Hiring!

posted by Lyles School of Civil Engineering on January 30, 2024

AECOM Now Hiring! Multiple positions available learn more here.

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- Advisement
- Archive
- Careers
- FE Exam
- Fellowships
- Graduate Program
- Opportunities
- Research

Must be studying in the Lyles School of Civil Engineering
Interest in Environmental Engineering

To apply, compose a one to three page essay describing the reason why you decided to become an Environmental Engineer or describe your commitment to the conservation of natural lakes and rivers or wastewater treatment as it relates to your career pathway as a civil engineer. In your essay, please provide a cover sheet that includes the following name, campus address, local telephone number, and email address. Please submit using this link by April 1st, 2024: https://purdue.cei.qualtrics.com/jfe/form/sv_89f8z71mFyG

This scholarship is provided in loving memory of Matt Kern. Matt was a senior Environmental Engineering student with a zeal for the earth's ecosystems, and before he could realize his own dreams, he was taken from us in an unfortunate accident in 1993 at the age

WJE ENGINEERS ARCHITECTS MATERIALS SCIENTISTS
Wiss, Janney, Elstner Associates, Inc.

Spring 2024

Tues. Feb. 27
11:00 a.m. - 3:00 p.m.

Student Organizations

Get Involved:

<https://engineering.purdue.edu/CE/Academics/Organizations>

Students Clubs in Civil Engineering such as:

- American Society of Civil Engineers (**ASCE**)
- Civil Engineering Student Advisory Council (**CESAC**)

Combined BSCE + MSCE Degree Program

This program will allow a student to dual count up to two graduate level courses between the BSCE and MSCE coursework requirements, thereby reducing the overall time required for the MSCE degree.

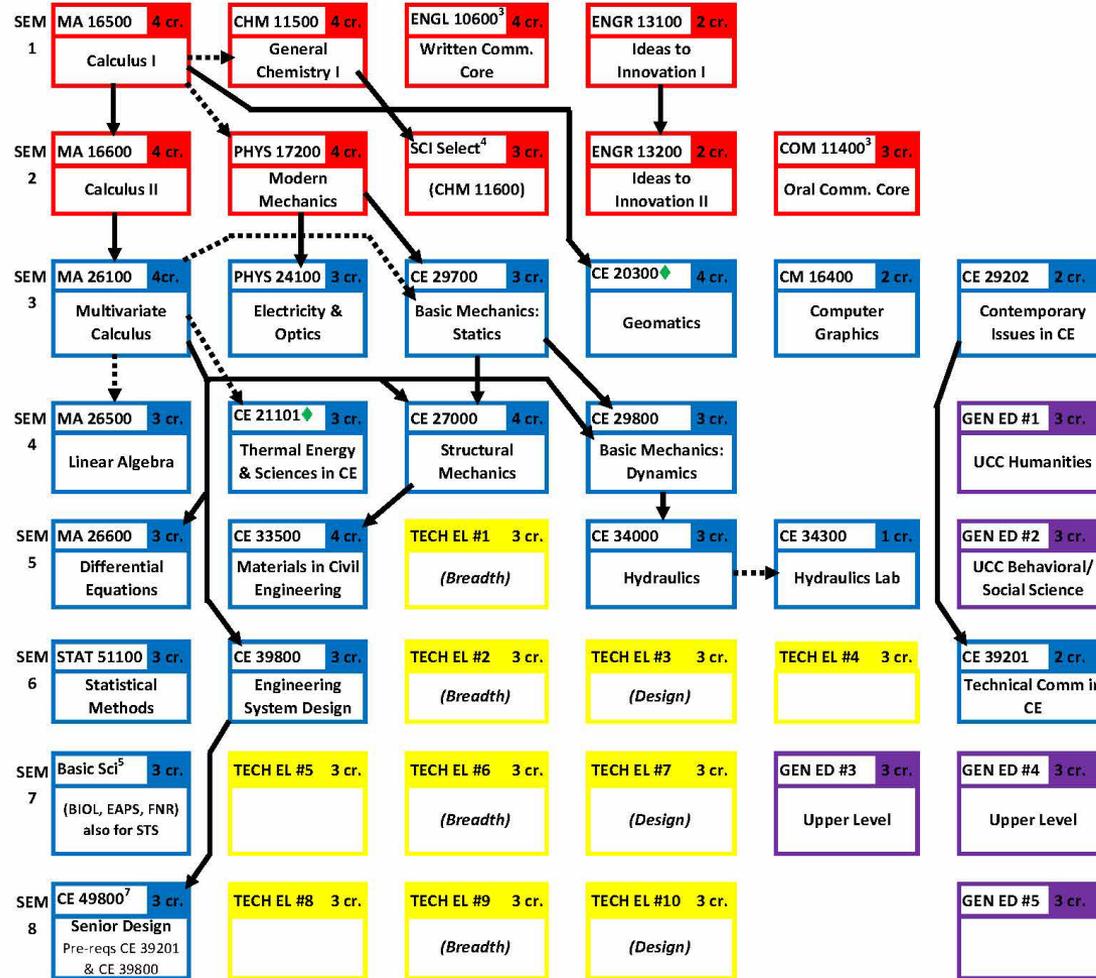
- Master's can be completed in as little as one year.
- Typically apply in semester 5 (first semester of Junior year)
- A minimum undergraduate cumulative GPA (CGPA) of 3.3 is required at the time of submission of the Combined BSCE+MSCE Degree program application.

Path Toward Your BSCE Degree

- You can make your own degree plan soon with EduNav
- Decide your specialty area
- Additional tool used for determining TE requirements:
<http://newton.ecn.purdue.edu/~ce/POS-2015/>

Basic Civil Engineering Curriculum Flowchart^{1,2}

Beginning
Fall 2024



See Foundational Core STS Requirements⁵

Legend:



Required by First Year Engineering



Civil Engineering Core Courses



Technical Electives



General Education Courses



See the other side of this document for Curriculum Notes & other information.

◆ CE 20300 & 21101 can be interchanged between semesters 3 & 4 of sophomore year

Italics: suggested Technical Electives listed on next page; total of 30 cr. Required

130 credit hours required for BSCE degree

Beware of Pre-requisites

- For example CE27000, Structural Mechanics requires both CE29700 Basic Mechanics: Statics and MA26100 Multivariate Calculus
- CE 49800 Senior design (taken in last semester) has CE39800 Engineering System Design and CE39201 Technical Communication as pre-requisites

Technical Electives

Select one of nine specialty areas in CE

- Architectural Engr
- Construction
- Environmental
- Geomatics
- Geotechnical
- Hydraulics and Hydrology
- Structural
- Transportation
- Or you can also choose to remain with a General program of study

Technical Electives

30 Credits (10 Courses for Technical electives)

- 7/10 electives need to be CE courses
- 4 Breadth courses

ARCH: CE 31100 HYD: CE44000
CON: CE 22200 STR: CE 37100
ENV: CE 35000 TRA: CE 36100
GEM: CE 40800/50801
GEO: CE 38300

- *Design requirement minimum 3 courses must be completed from the following list*

ARCH: CE 41300, 41400
CON: CE 52200, 52300
ENV: CE45600, 45700, 497 Water Treatment
GEM: CE 30300, 30600
GEO: CE 48300, 58300, 58400, 58500
HYD: CE 44000, 54300, 54600, 54900
MAT: CE 53000, CE 53500
STR: CE 47000, 47300, 47900
TRA: CE 36100, 46100, 56200, 56300, 56500, 56700

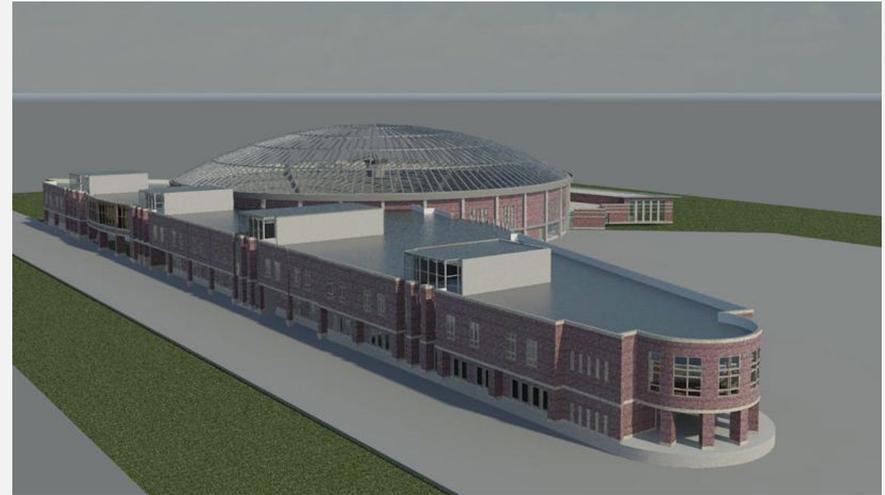
Minors and Certificates

Minors and Certificate information is linked in the catalog: <http://catalog.purdue.edu/>

- Entrepreneurship and Innovation Certificate
- Innovation & Transformational Change Minor
- GEARE Certificate or Global Engineering Minor
- Cornerstone Certificate
- Many minors available including: management, BIM, economics, foreign language, sustainability engineering, etc.

CONSTRUCTION GRAPHICS- BUILDING INFORMATION MODELING

- CM 16400- Construction Graphics
- CM 360- Intro to Construction Documentation- BIM
 - Revit
 - Residential House
 - Commercial Project
 - Steel Construction
- CM 462- Construction Documentation II
 - Commercial Construction Only
 - All Mechanicals
- CM 460- Building Information Modeling
 - Group project– Model a Building On Campus
 - Tour that building– get to see parts of building not normally seen by public
 - Intro to Worksets– how industry utilizes Revit’s abilities.



Innovation and Transformational Change Minor

UNDERGRADUATE MINOR
OPEN TO ALL MAJORS



**INNOVATION &
TRANSFORMATIONAL
CHANGE**



Learn world-class methods and techniques to transform society's most pressing challenges into opportunities to make a significant impact.

Earn a minor while meeting elective requirements for your major!

18 CREDITS

Choose your own path from nearly 90 courses in 6 areas

- ▶ Fundamentals of Innovation
- ▶ Holistic Solution Design
- ▶ Motivating Change
- ▶ Achieving Financial Sustainability
- ▶ Understanding Grand Challenges
- ▶ Breakthrough Thinking



LEARN MORE:

<https://engineering.purdue.edu/Innovation/students/minor>



QUESTIONS:

innovation@purdue.edu



GET STARTED!

ENGR-30500-H01 (3 credits):

Fundamentals of Innovation Theory & Practice Honors

OPEN TO HONORS AND NON HONORS STUDENTS



- Explore contemporary socio-technical challenges using innovative problem solving techniques from management, design, engineering, and the social sciences

General Education Elective Policy

General Education Electives must be selected from the following:

- Social Sciences

AGEC, ANTH, COM, ECON, HDFS, POL, PSY, SLHS, SOC

- Humanities

AAS, AD, AMST, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, DANC, ENGL, LC, FR, GER, GREK, HEBR, HIST, IDIS, ITAL, JWST, JPNS, LALS, LATN, LING, MARS, MUS, PHIL, PTGS, REL, RUSS, SCLA, SPAN, THTR, WGSS

Note: Most courses in these subjects are allowable, provided the course is open to CE students and isn't focused primarily on professional training, natural science or mathematics. All courses are subject to approval when submitting the CE Plan of Study.

General Education Policy

- 15 credit hours + CE 29202 and CE 39201
- 1 course from Human Cultures: Behavioral/Social Science for core
(courses listed on this website:
<http://www.purdue.edu/provost/initiatives/curriculum/course.html>)
- 1 course from Human Cultures: Humanities for core
- Minimum 6 credit hours must be taken from courses: at the 300-level or above or have a prerequisite (Non-Introductory) in the same subject (see listings in catalog.purdue.edu)

University Core Curriculum

- Every student must complete the Foundational Learning outcomes
- Majority of core is within the FYE course requirements, review after enter CE to see what is remaining
- Science Technology & Society (STS) Foundational Core is typically fulfilled by taking EAPS 10000, 10400, 12000, or 12500 for your Basic Science Elective (CE ABET requirement for another science elective)
- If you use BIOL 11000 for your science selective (or other Basic Science not on the STS list such as EAPS 11100 - Geology) you may meet the STS requirement either via another General Education/ Technical Elective that is on the STS list such as POL 22300 Introduction to Environmental Policy or EPICS. Can also take CE/EEE 35500 Environmental Sustainability for Tech Elective.

Civic Literacy

***Note not imbedded in CE flowchart**

- <https://www.purdue.edu/provost/about/provostInitiatives/civics/>
- Requirements listed in myPurdue
- Must be completed before graduation, take the exam sooner than later as lots of content from high school.

Core Course Grade Policy

- Must earn a grade of C- or better for all blue courses on the flowchart; this is “the core”.
- Grade of C- or better is required to use the course as a prerequisite.
- A student shall be dismissed from the School of Civil Engineering after 3 attempts to complete a core course where each attempt resulted in a grade of D+, D, D-, F, W or WF.
- You have been informed of the CE Core Course Policy by attending the Civil Orientation meeting.
- Also, Purdue allows only 3 enrollments in any course.

Core Classes

CE 20300	CE 34300	MA 26600
CE 21101	CE 39201	PHYS 24100
CE 27000	CE 39800	STAT 51100
CE 29202	CE 49800	
CE 29700	Basic Science Requirement	
CE 29700	CM 16400	
CE 33500	MA 26100	
CE 34000	MA 26500	

Additional Grade Policies

Civil Engineering Index

- Minimum 2.0 GPA is required in CE classes and overall
- Includes all CE-designated courses, or any direct equivalent course used to satisfy a CE-designated course

Transfer Credit Limit Policy

Maximum 10 credits allowed as approved transfer from another university or regional campus for upper level technical courses.

- All CE core courses at the 30000+ level
 - CE 49700/33100, 34000, 34300, 39201, 39800, 49800
- All Technical Electives
- Impacts 43 credits total

A Word of Caution

Please note: 18 credit hours for Fall 2024 is a large load. Lab time for CM 16400 and CE 20300 is not included within the 18 credit hours. Some options for you include the following courses in Summer 2023

- **CM 16400 Computer Graphics *is taught online in Summer 2024.***
- **PHYS 24100 Electricity & Optics *is taught online in Summer 2024.***
- ***Wait to take PHYS 24100 until later.***
- ***Take a General Education course instead of PHYS24100 in Fall 2024.***
- ***CE 29202 in Summer 2024.***

Also PHYS 24100, CE 20300, and CE 21101 can be interchanged within Semesters 3 and 4 (plus PHYS 24100 in summer)

Shiva Haghighi Student Success Center– HAMP 1115

We have a student room available to be used for studying and some office hours are held in this room.

In addition, peer tutors are available for: CE21101, CE27000, CE29700, CE29800, and CE34000. Sign up in Boiler connect

CE29900 Intro Courses

We offer 1 credit courses that may be applied for Technical Elective credit (max of 3 cr.). Learn more about an area emphasis or specific topic. Beneficial if undecided about an area or if topic is of interest to you.

- **CE29900 Next Generation Mobility TBD** (First 8 weeks) – 1 credit
- **CE 29900 3D Printing Of Concrete** (Offered this spring 22) – 1 credit
- **CE29900 Intro to Water Engineering Fall 2022** (First 5 weeks) – 1 credit

Summer 2024 Courses

- Visit <http://www.purdue.edu/thinksummer/> for a complete list of all summer courses.
- Courses typically offered:
 - General Education Electives –Humanities or Social Science electives
 - Math courses
 - Basic Science Elective – specific EAPS or BIOL courses
 - PHYS 24100
 - Study Abroad – Maymester CE 49700 or other engineering approved program counts for a Technical Elective (3 cr.) (most trips are closed but an option for future summers)
 - CM 16400 Computer Graphics
 - CE 29202 Contemporary Issues in CE

Schedule Appointments on Boiler Connect

<https://purdue.campus.eab.com>

CE Main office HAMP 1141

Contacts

Kathy Heath – Program Administration Manager

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- 494-2157
- heathk@purdue.edu

Contacts

Julie Jesiek – Undergraduate Advisor

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- jjesiek@purdue.edu

Marty Lah – Undergraduate Advisor

- HAMP 1141F
- 496-2379
- mlah@purdue.edu

CE Scholarships

**Apply for 2024-25 Civil Engineering
Scholarships on-line at:**

<http://eng.purdue.edu/CE/scholarship-app>

Deadline: April 5, 2024

Next Advising Steps

- We will open the CRF for all students that attended this meeting
- Submit courses in CRF based on our recommendations by April 8 at 5 pm
- Follow up 15 min appointments will be made available last week of March and first week of April for those that have additional questions.
- Open registration April 22nd

QUESTIONS?

Civil Engineers are entrusted by society to create a sustainable world and enhance the global quality of life
(ASCE Vision for Civil Engineering in 2025)