LYLES SCHOOL OF CIVIL ENGINEERING

SOPHOMORE ORIENTATION, ADVISING & REGISTRATION

2022-23 Academic Year March 2022
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

60+ Faculty
9 Concentrations

- 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

Senior 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
Meet Your Advisors

Patrick Tiffany

Academic Advisor

HAMP 1141
494-8066
Ptiffany@purdue.edu
Heather Philhower
Administrative Assistant
CE Main Office HAMP 1141

HAMP 1141
494-2166
fphilhow@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
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: Any State  
Search

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.
Purdue Lyles School of Civil Engineering
Student Information and Updates

Monday, March 8, 2021

Internship Program with Irving Materials, Inc. (imi)

Search Topics
- *Co-op (6)
- *Internship (21)
- *Jobs-Full-time (20)
- advising (9)
- Alumni (5)
- Career Opportunities Full-time (272)
- Career Preparation Assistance (115)
- Co-op (24)
- Courses (9)
- Fall 2020 (46)
- Fellowships

Blog Archive
- 2021 (43)
- March (6)
- Internship Program with Irving Materials, Inc. (imi)
- Job Opportunities at SAM Companies
- PVM Food Pantry Open Mondays and Thursday
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)
Path Toward Your BSCE Degree

- MyPurdue Plan will show degree progress with Civil requirements and you can make your own degree plan
- Decide your specialty area
- Move to Faculty advisor after finishing CE 27000 or CE 29800
Basic Civil Engineering Curriculum Flowchart

1. Beginning Fall 2021

SEM 1
MA 16500 3 cr. Calculus I

SEM 2
MA 16600 4 cr. Calculus II

SEM 3
MA 26100 4 cr. Multivariate Calculus

SEM 4
MA 26500 3 cr. Linear Algebra

SEM 5
MA 26600 3 cr. Differential Equations

SEM 6
STAT 51100 3 cr. Statistical Methods

SEM 7
BASIC SCI 3 cr.
(BIOL, EAPS, FNR) also for STS

SEM 8
CE 49800 3 cr. Senior Design
Pre-reqs CE 39201 & CE 38800

CHM 11500 4 cr. General Chemistry I

PHYS 17200 4 cr. Modern Mechanics

SCI Select 3 cr.
(CHM 11600)

ENGL 10600 4 cr. Written Comm. Core

ENGR 13100 2 cr. Ideas to Innovation I

COM 11400 3 cr. Oral Comm. Core

ENGR 13200 2 cr. Ideas to Innovation II

CE 29700 3 cr. Basic Mechanics: Statics

CE 20300 4 cr. Geomatics

CE 29202 2 cr. Contemporary Issues in CE

CGT 16400 2 cr. Computer Graphics

CE 21101 3 cr. Thermal Energy & Sciences in CE

CE 27000 4 cr. Structural Mechanics

CE 29800 3 cr. Basic Mechanics: Dynamics

CE 335/497 4 cr. Materials in Civil Engineering

TECH EL #1 3 cr. (Breath)

TECH EL #3 3 cr. (Design)

TECH EL #5 3 cr. (Breath)

TECH EL #6 3 cr. (Design)

TECH EL #7 3 cr. (Social Sciences)

TECH EL #8 3 cr. (Breath)

TECH EL #9 3 cr. (Design)

TECH EL #10 3 cr. (Social Sciences)

CE 39800 3 cr. Engineering System Design

TECH EL #2 3 cr. (Breath)

CE 34000 1 cr. Hydraulics

CE 34300 1 cr. Hydraulics Lab

GEN ED #1 3 cr. UCC Humanities

GEN ED #2 3 cr. UUC Behavioral/ Social Science

GEN ED #3 3 cr. (Social Sciences)

GEN ED #4 3 cr. (Humanities or Social Science)

GEN ED #5 3 cr. (Humanities or Social Science)

Legend:

See Foundational Core STS Requirements

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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 40800/59700 |
| GEO: CE 38300 |

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

| ARCH: CE 41300, 41400 |
| CON: CE 52200, 52300 |
| ENV: CE 45600, 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 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, construction graphics (BIM), economics, foreign language, sustainability engineering, etc.
CONSTRUCTION GRAPHICS - BUILDING INFORMATION MODELING

- CGT 16400- Construction Graphics
- CGT 360- Intro to Construction Documentation- BIM
  - Revit
    - Residential House
    - Commercial Project
      - Steel Construction
  - CGT 462- Construction Documentation II
    - Commercial Construction Only
      - All Mechanicals
- CGT 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

FALL 2021

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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.
15 credit hours + CE 29202 and CE 39201

Minimum 6 credit hours must be taken in Social Sciences subjects; 1 course must be from Foundational Behavioral/Social Science

Minimum 6 credit hours must be taken in Humanities subjects; 1 course must be from Foundational Behavioral/Humanities

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
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.
Civic Literacy

*Note not imbedded in CE flowchart

- https://www.purdue.edu/provost/about/provostInitiatives/civics/
- Requirements listed in myPurdue worksheet
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.
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 2022 is a large load. Lab time for CGT 16400 and CE 20300 is not included within the 18 credit hours. Some options for you include the following courses in Summer 2022:

- CGT 16400 Computer Graphics *is taught online in Summer 2022.*
- CE 29202 Contemporary Issues in CE *is taught online in Summer 2022.*
- PHYS 24100 Electricity & Optics *is taught online in Summer 2022.*
- *Wait to take PHYS 24100 until later.*
- *Take CE 21101 Thermal/Energy Sciences for CE* instead of PHYS 24100.
- *Take a General Education course instead of PHYS24100 in Fall 2022.*

Also PHYS 24100, CE 20300, and CE 21101 can be interchanged within Semesters 3 and 4 (plus PHYS 24100 in summer)
Additional TA Support (Lyles TA) for CE29700 Statics, CE29800 Dynamics, and CE34000 Hydraulics. Instructors will provide information on TA office hours held in our student success center located in HAMP 1115...
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
Visit [http://www.purdue.edu/thinksummer/](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.) (currently closed but an option for Summer 2023)
- CGT 16400 Computer Graphics
- CE 29202 Contemporary Issues in CE
Schedule Appointments on Boiler Connect

https://purdue.campus.eab.com

If you haven’t scheduled an appointment yet, please use the campaign link we have sent out. We are available for in-person or on-line appointments.

CE Main office HAMP 1141
Contacts

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- heathk@purdue.edu

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Contacts

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- jjesiek@purdue.edu

Marty Lah – Undergraduate Advisor
- HAMP 1141F
- 496-2379
- mlah@purdue.edu
CE Scholarships

Apply for 2022-23 Civil Engineering Scholarships on-line at:
http://eng.purdue.edu/CE/scholarship-app
Deadline: April 9, 2022
Next Advising Steps

- Schedule appointment via Campaign link if you have not yet done so
- Submit courses in CRF based on our recommendations by April 11
- Open registration April 21st
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)