



University of New Haven

# Tagliatela College of Engineering

Orientation and Charge In

Spring 2025

# **College Overview**

Office of the Dean	Chemistry and Chemical Engineering and Biomedical Engineering Department (CCBE)	Civil and Environmental Engineering Department (CEE)	Engineering and Applied Science Courses (EASE)	Electrical and Computer Engineering and Computer Science Department (ECECS)	Mechanical and Industrial Engineering Department (MIE)
Dean Ron Harichandran	Chair: Dr. Dequan Xiao	Chair: Dr. Byungik Chang	Coordinator: Professor Eric Brisart	Chair: Dr. Ali Golbazi	Chair: Dr. Ganesh
Associate Dean Stephanie Gillespie Operations Manager: Dionne Gray-Wilson	BS Chemistry	BS Civil Engineering	BS Engineering	BS Electrical and Computer Engineering	Balasubramanian
	BS Chemical and Biomolecular Engineering		EASC courses	BS Computer Science	BS Mechanical
	MS Biomedical Engineering (Dual Degree)	Sustainability Minor	Entrepreneurial Mindset in STEM Certificate	BS Cybersecurity	Engineering

# First Semester Curriculum

### Engineering

- Introduction to Engineering
- Calculus 1
- General Chemistry 1 or Physics 1
- Seminar in Academic Inquiry and Writing (English)
- Introduction to Communication

Computer Science and Cybersecurity Introduction to Computing Introduction to C Programming Seminar in Academic Inquiry and Writing (English) Pre-Calculus or Calculus 1 Core Curriculum Course





#### Critical Thinking/Problem Solving

Exercises sound reasoning to analyze issues, make decisions, and overcome problems. Able to obtain, interpret, and use knowledge, facts, and data in this process and may demonstrate originality and inventiveness.

#### **Oral/Written Communication**

Articulates thoughts and ideas clearly and effectively in written and oral forms to persons inside and outside of the organization. Has public speaking skills; is able to express ideas to others; and can write/edit memos, letters, and complex technical reports clearly and effectively.



#### Teamwork/Collaboration

Builds collaborative relationships with colleagues and customers representing diverse cultures, races, ages, genders, religions, lifestyles, and viewpoints. Able to work within a team structure, and can negotiate and manage conflict.

#### **Digital Technology** Leverages existing digital technologies ethically and efficiently to solve

problems, completes tasks, and accomplishes goals. Demonstrates effective

adaptability to new and emerging technologies.

#### Leadership

Leverages the strengths of others to achieve common goals, and uses interpersonal skills to coach and develop others. Able to assess and manage his/her emotions and those of others; uses empathetic skills to guide and motivate; and organizes, prioritizes, and delegates work.

#### Professionalism/Work Ethic

Demonstrates personal accountability and effective work habits, e.g., punctuality, working productively with others, and time workload management, and understands the impact of non-verbal communication on professional work image. Demonstrates integrity and ethical behavior, acts responsibly with the interests of the larger community in mind, and is able to learn from his/her mistakes.



#### **Career Management** Identifies and articulates one's skills, strengths, knowledge, and experiences relevant to the position desired and career goals, and identifies areas

necessary for professional growth. Able to navigate and explore job options, understands and can take the steps necessary to pursue opportunities, and understands how to self-advocate for opportunities in the workplace.

#### **Global/Intercultural Fluency**

Values, respects, and learns from diverse cultures, races, ages, genders, sexual orientations, and religions. Demonstrates openness, inclusiveness, sensitivity, and the ability to interact respectfully with all people and understand individuals' differences.

### Your education is more than technical

"[My biggest mistake is probably] weighing too much on someone's talent and not someone's personality. I think it matters whether someone has a good heart."

- Elon Musk



Nine Core Curriculum Competencies\*

- 1: Written Communication
- 2: Oral Communication and Presentation
- 3: Mathematical and Quantitative Literacy
- 4: Scientific Exploration
- 5: Critical Thinking and Problem Solving
- 6: Historical Perspectives
- 7: The Individual and Society
- 8: Global and Intercultural Awareness
- 9: Perspectives on Creative Arts

\*Some Core competencies are pre-assigned with specific Math and Science Courses required for your degree program.

University Core Curriculum

# Classroom Technology- TCoE Laptop Policy

TCoE classes utilize a variety of technology and software during the class periods. We provide the software, but you will need to have a compatible laptop for the duration of your studies.

### All Engineering Students:

• Windows PC, Intel i7 processor, 16 GB or more RAM, 1TB or more SSD, Dedicated Graphics Card

### Computer Science and Cybersecurity & Networks Students:

• You have the option to purchase a Windows or Mac computer (check your email).

### **Chemistry Students:**

• No laptop required, but most college courses will benefit from personal ownership of a laptop.

Important to note for all academic programs: Chromebooks and Surface in S-mode tablets cannot run all required software and services and are not recommended.



# Differences between high school and college

	In High School	In College
Class Time Expectations	You are generally introduced to content during class time	May have to read or watch videos in advance of coming to class, class is for discussion
Homework and Studying Expectations	Homework given regularly, may have class time to work on it	Homework weekly, but is fully outside of class hours. Plan for at least 6 hours of outside of class time for study/hw per course
Asking Questions	You usually have time during class to ask questions	If a class is busy, you will have to go to office hours with the professor or TA to ask questions
If you don't succeed on the first time	You may be given a chance to resubmit your homework or retake an exam	A low grade stays in your grade calculation. Need to study before you start getting low grades

# Faculty-Student communication is key to academic success

- Every course has a syllabus provided within Canvas, our learning management platform, where you can find contact
  information for faculty members and information about the expectations for each course. Communicate with your faculty
  through email and faculty office hours.
- Professors will provide feedback to students on their work, provide grades with Canvas and share additional academic reminders through Navigate. Students should monitor Canvas and Navigate closely and watch for email communication from faculty.





### <u>In TCoE</u>

- Pre-Registration Meetings with Faculty each Semester
- Faculty Office hours in person and through Zoom
- Peer Assistants

### Throughout the University

- MathZone- walk-in appointments, tutors, and customized curriculum
- CSS: Center for Student Success
- CLR: Center for Learning Resources
- CDC: Career Development Center
- ARC: Accessibility Resource Center

Academic Advising and Assistance

### How to meet with your advisor

 Level Undergraduate
 Classification Junior
 Major Cybersecurity and Networks
 Program Bachel

 Advisor Liberty Page (Primary)
 Student Status
 Active
 Academic Attribute
 Honors
 Overall GPA

 Undergraduate Catalog Year
 2020-2021

- Confirm your academic advisor in DegreeAudit or Navigate
- Faculty will send out emails with sign-up links or information for pre-registration advising (~October + February/March)
- Some faculty have enabled self-signup of office-hours appointments via:
  - Navigate
  - Email links such as youcanbookme or calendly
- Send an email, or stop by their office during office hours.



### WELCOME TO THE FIRST YEAR MENTORSHIP PROGRAM!



### MENTOR COLLECTIVE



### Some ways a mentor can help you

- Offer **insight** on which campus resources they found most useful
- Share tips on how to manage **financial or academic stressors**
- Give advice on **networking effectively** when looking for friends, or navigating the internship market
- Share study habits that worked for them
- Help their mentee with **balancing work**, school, and life to graduate with their intended degree

# Mentee's Timeline

Meet your

mentor

Sign up for a

mentor

1 year later: Liked your experience? Sign up to become a mentor!

Complete your onboarding steps Work on achieving your goals with your mentor

### bit.ly/NHFYEmentee





## Dual-Degree Signup ends 1/28

- Get your BS + MS in a shorter length of time with the dual-degree program
- Academic advising starts in your first year to make sure you are setup for graduate coursework as a senior
- Must opt-in by end of Add/Drop period (1/28) by emailing Rob Holub (<u>rholub@newhaven.edu</u>)
  - 1 Year

Average time saved over obtaining degrees separately.

\$30k

Estimated additional salary for students obtaining a Master's degree.

\$60k

Estimated average value of entering the workforce one year early.

# **Quick Thinking Design Sprint**

- Can you identify a problem, propose a solution, and convince industry judges yours is the best, all within 8 hour?
- CSCI 1109 and EASC 1107 integrates this as a part of the course- save the date now for February 8<sup>th</sup>!
- Complete part of your EM in STEM Certificate now!
- To signup for more information about the EM in STEM certificate- email Dr. Stephanie Gillespie (sgillespie@newhaven.edu)

# **Exploring Your Entrepreneurial Mindset**

- Meet your peers and explore your mindset with EM BINGO
- You can ask each person only two questionsthey will respond yes or no. If they respond yes, that defines them, you can mark the space off.
- Try to stay with someone until you each mark off a space on the other's board if possible.

Join me in the front of the room when you complete 2 BINGO rows (vertical, horizontal, diagonal) for a prize!



https://bit.ly/3mpFiLE

# What does your first day of college look like?

- Check your schedule and room assignments- things get updated!
- Check your email and check Canvas
  - Remote vs On-Ground vs Online class assignments, what to bring to class
- Set your alarms and plan time for meals
- Leave early and plan to get there 5 minutes early

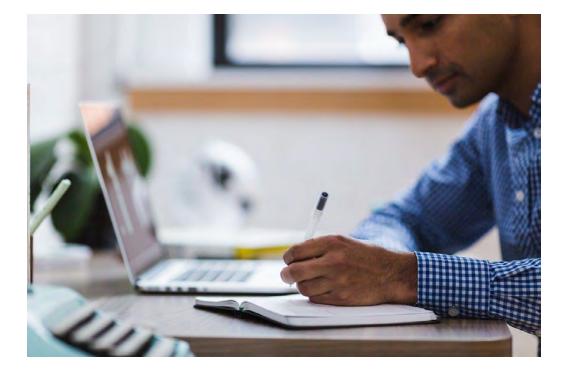


# What should you do during your first classes?

- Pay attention to the syllabus overview- each class has different policies
- Interact and engage with your peers. Find a study buddy or group
- Ask questions if you are confused
- Embrace new technology and styles of teaching- it may be different from high school



# What happens over the first week?



- Attend all of your classes
- Put homework due-dates on your calendar
- Obtain necessary class supplies, including textbooks
- Get used to checking email every day (at a minimum)
- Email your academic advisor if you need to change courses, or stop by CSS drop-in hours

## Making it a successful first week

- Find your resources on campus
- Visit office hours to meet the faculty
- Start your study habits
- Find ways to get involved
- Meet new people
- Find your groove



### What will the semester look like?

- Typically 1 or 2 exams during the course, and 1 final exam
- Many classes also have a final project or report
- Be prepared to have multiple hw assignments with various due dates. Many classes have homework every week.
- You will probably have at least one bad grade
  - You can recover from a negative academic experience, but better to over-prepare and avoid it all together!

### **Important Dates**

- Tuesday Jan 21- Classes Begin!
- Tuesday Jan 28- Last day to add/drop a class
- Friday March 7- Midterm grades due by faculty
  - Expect exams the week before
- Sunday March 9– Sunday March 16- Spring break (no classes)
- Friday April 4- Last day to withdraw from a class.
- Monday May 5- Last day of class
- Tuesday May 6 Reading Day
- May 7-May 13- Final exams.
  - Check your final exam schedule before booking travel for the send of semester.

# Because college isn't the goal, a career is!

### Prepare now for your future

### career

#### Get involved- build experiences for your resume!

- Leadership roles in professional student organizations
- Student club competitions
- Attend panels and events with industry representatives

#### The big events:

- Fall Career Fair
- Spring STEM Career Fair
- Internships: typically after junior year
- PE licensure



### Learning and Belonging Outside the Classroom

#### Diversity Organizations

- Society of Women Engineers (SWE)
- Society of Hispanic Professional Engineers (SHPE)
- National Society of Black Engineers (NSBE)
- Women in Cybersecurity



#### Professional Organizations

- ACS (Chemistry)
- AIChE (ChemE)
- ASCE (Civil)
- ASME (MechE)
- Engineers Without Borders (EWB)
- IEEE (ElecEng.)
- IISE (Ind. & Syst. Eng)
- Robotics Club
- Hacking Team





#### Honor Societies

- Eta Kappa Nu
  - ECE
- Pi Tau Sigma
  - MechE
- Theta Tau
  - all Engineering
- Upsilon Pi Epsilon
  - CompSci

#### General Opportunities

- Makerspace
- Engineering Student Ambassadors
- EASC Course Peer Assistants
- Summer Undergraduate Research Fellowship (SURF)







# **College Professionalism**

#### Courses

- Attendance is expected- check your syllabus
- Cameras may be used for participation, exams, etc.
- Have questions? Check the syllabus first!

#### **Emails**

- Address emails to Professor X or Dr. X (avoid Mr., Ms., Mrs., or FirstName)
- Most faculty members respond with 24 hours, but it isn't instant. Weekend responses vary.
- Keep your email private- if your parents want to email, they should use their own account (don't share your password)

#### Grades

- It is okay to ask for clarification on how an assignment was graded
- Grading concerns should be brought to the professor first, then the chair, then the Associate Dean.

## **University of New Haven Resources**

- Help with general study habits or college success: **Center for Student Success (CSS)**
- Need accommodations to be successful in courses: Accessibility Resource Center (ARC)
- Help with course materials: Faculty Office Hours, Peer Assistants, Center for Learning Resources (CLR)
- Need help with starting a term paper, grammar, or "too wordy" essays: Writing Center
- Uncertain what courses to take or how to fill out registration related forms: Academic Advisors
- Hungry or missing meals: Campus Pantry
- Need clothing for an interview: **Career Closet**
- Someone to listen- stress, anxiety, mental health, etc.: **Counseling and Psychological Services**
- Don't know where to start: **TCoE Associate Dean**
- Report bias, inappropriate conduct, etc.: **Report It** <u>forms</u> or Dean of Students

Supplies available for check-out from Dean's Office: Graphing and Non-Graphing Calculators, Padfolios (for interviewing), Arduino Kits, Laptops\*

The Center for Learning Resources provides complimentary academic content support to all University of New Haven graduate students. We offer peer and professional mentors in a variety of subjects to graduate students.

Make an in-person or remote (Zoom) appointment with us via the Navigate App. Walk-ins are always welcome.



ARC

### Who is the Accessibility Resource Center?

The department on campus tasked with supporting students who have chronic health related disorders, specific disabilities, and military service-connected disorders.

They also assist students who incur temporary medical conditions which impact their ability to attend to their academics.

The Role of ARC

- If you have a disability or chronic medical condition, DO NOT WAIT until it has negatively impacted your grades before you register with ARC to receive accommodations. Accommodations can help prevent you from receiving low grades and their consequences.
- Accommodations are not retroactive, and if you wait, we may not be able to fix a situation caused by your waiting to ask for help.
- International Students: contact both UIS and ARC If you have a temporary disability or chronic health related situation arise and need assistance. If an international student is unable to meet the full-time enrollment requirements of the visa because of healthrelated problems, they must seek accommodations from the Accessibility Resources Center (ARC)

Sample ARC Accommodations What kind of accommodations can you expect?

<u>Permanent accommodations</u> are based on the functional limitations of your specific disability so they will be tailored specifically for your needs.

 Some common permanent accommodations include classroom access accommodations (accessible classroom, use of computer for taking notes, etc.) and exam accommodations (extended time, quiet environment).

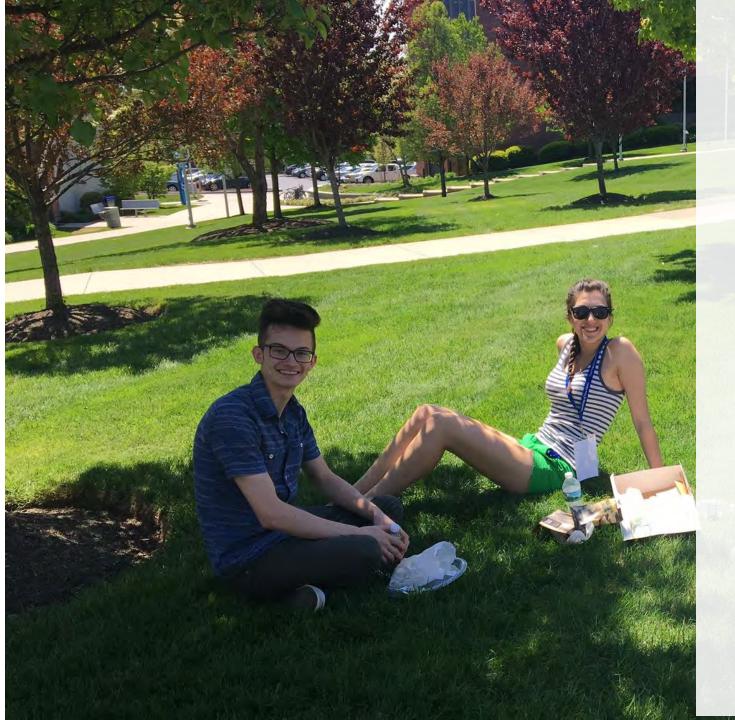
<u>**Temporary accommodations**</u> are also based on specific disabling condition and are specifically tailored.

• Some common temporary accommodations include a reduced course loads with approval of UIS, use of accessible van service, flexible attendance, extended deadlines for assignments due during a hospitalization or symptomology flare, test make up.

# **TCoE Professional Enrichment Program** (PEP)

- Your success in your degree is based on involvement and effort both in and outside of the classroom
- Most TCoE programs have adopted the PEP initiative, which will require you to engage in events or activities outside of the classroom
- 16 units of activities before graduation, will be tracked through Canvas
- Aim for 2 PEP-approved events per semester.
- Events may include professional speakers, research seminars, skill-development workshops hosted by student organizations or Career Development Center, etc.

# Your advisor will follow check-in on your progress each year. Start early or senior year will be busy!



### **Keeping in Touch**

Be on the lookout for a follow email from the Tagliatela College of Engineering with this presentation and signup links for our mentoring program!

Send your questions to: Dr. Stephanie Gillespie, Associate Dean, TCoE <u>sgillespie@newhaven.edu</u>