# **SOAR 2024**

# STUDENT ORIENTATION AND ADVISING

Dr. Stephanie Gillespie

University of New Haven







# TAGLIATELA COLLEGE OF ENGINEERING (TCOE)

# **College Structure and Overview**

Office of the Dean

Dean Ron Harichandran

Associate Dean Stephanie Gillespie

Assistant to the Dean: Dionne Gray-Wilson Chemistry and
Chemical
Engineering
and
Biomedical
Engineering
Dept (CCBM)

Chair: Dr. Dequan Xiao

BS Chemistry

BS Chemical and Biomolecular Engineering

MS Biomedical Engineering (Dual Degree) Civil and Environmental Engineering Department (CEE)

Chair: Dr. Byungik Chang

> BS Civil Engineering

Sustainability Minor

Environmental Engineering Minor Engineering and Applied Science Courses (EASE)

> Coordinator: Professor Eric Brisart

BS Engineering

EASC courses

Entrepreneurial Mindset in STEM Certificate Electrical and Computer Engineering and Computer Science Dept (ECECS)

> Chair: Dr. Ali Golbazi

BS Electrical and Computer Engineering

> BS Computer Science

BS Cybersecurity

Mechanical and Industrial Engineering Department (MIE)

Chair: Dr. Ganesh Balasubramanian

BS Mechanical Engineering



What does it take to be a successful student in the Tagliatela College of Engineering?



## **First Semester Curriculum**

#### **Engineering Students**

Introduction to Engineering

Calculus 1

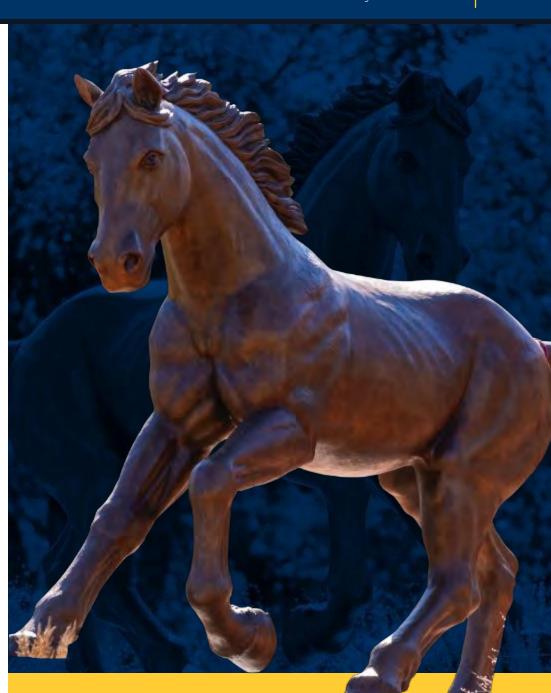
General Chemistry 1 or Physics 1

Seminar in Academic Inquiry and Writing (English)

Introduction to Communication

#### **Computer Science and Cybersecurity Students**

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



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.



# 0

#### 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

NACE Top 8 skills desired by employers []]

#### 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

# University Core Curriculum

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

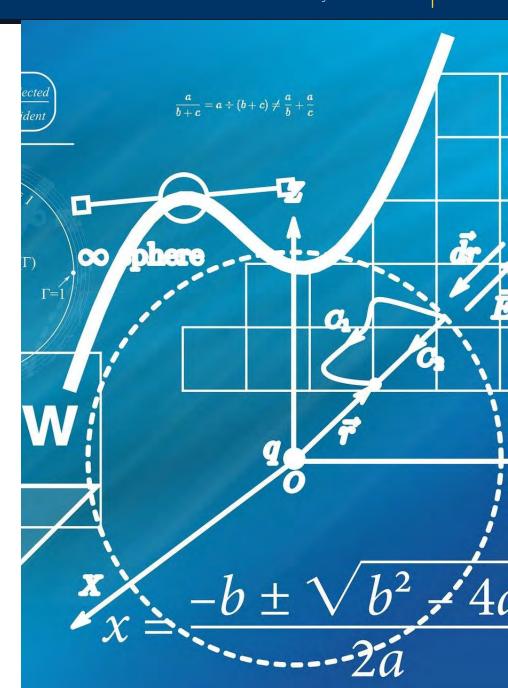
## **Initial MATH Placement Matters**

Placement was based on prior math courses and grades earned.

If you are not starting in the "expected" math course, you may need to catch-up or you won't be able to graduate in 4 years.

Not happy with your initial placement? You can:

- Make sure we have your AP test results or college class transcript
- Take a math placement exam by July 15
- Accelerate through MATH 1110 + MATH 1115 in the fall semester with the Math Zone



# **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.



#### Before classes start

- Charge- In and Orientation sessions week before classes start
- Academic advisor may be available during email during summer, but expect delays
- Review your academic worksheet or degree audit for preview of all required courses in your program

#### Once classes start

- Visit faculty during office hours, or make an appointment
- Academic advising for Spring course registration will happen in October- must book an appointment to be able to register

# Getting acquainted to your academic program

# 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 officehours appointments via:
  - Navigate
  - Email links such as youcanbookme or calendly
- Send an email, or stop by their office during office hours.



#### In TCoE

- 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



### **Connect with a Peer Mentor**

TCoE First Year Mentoring program

- Incoming students are mentored by sophomores and juniors (transfer mentors available)
- Mentor/mentee pairing is based on interests of both parties
- Texting, meeting in person, or emails you choose how often you talk and for what reasons.
   Start building connections this summer!

Signup link: <u>bit.ly/NHFYEmentee</u>

Note this program is separate from the mentoring program sponsored by the Myatt Center for Diversity and Inclusion.



University of New Haven



# 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

# Learning happens outside of the classroom too

#### Diversity Organizations

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

#### 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)













# 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



# **Experiential Education** (ExEd)

Internship course a required part of the curriculum, typically 200-300 hours of work in relevant industry.

Culminating capstone experience to combine your academics with industry-sponsored projects

Other experiences for hands-on learning include labs, service-learning courses, and more.



# **Entrepreneurial Mindset Certificate in STEM**

- Silver Level: Exploration
- Gold Level: Participation
- Platinum Level: Demonstrated Leadership

#### **Events**

- LLC Discussion Dinners
- 24-Hr Design Sprints
- University Innovation Fellowship Program
- EASC 4420: Entrepreneurial Concepts for Engineers and Scientists
- Alvine New Venture Pitch Competition



# Your four-year college to career plan

#### First Year:

- Engineering LLC
- · Intro courses
- Get involved in student orgs
- Meet your academic advisor
- Create your LinkedIn Profile

#### Third Year:

- · Begin to choose technical electives
- Continue extracurricular and leadership activities
- · Consider undergraduate research
- Continue to build your professional network
- Determine direct to industry or grad school
- · Find your internship

#### Second Year:

- Update your resume from HS to College
- · Expand into technical courses
- · Take on leadership roles
- Begin meeting companies at events
- Visit Career Development Center for resume workshops and interviewing workshops

#### Fourth Year

- Capstone design experience
- Job applications or grad school applications
- Continued networking with technical societies and speakers on campus

# **Dual Degrees**

Interested in also earning a MS Degree?

To enter the direct-entry dual-degree program and ensure proper advising, you must opt-in before add/drop (first week of school).

If students do not opt-in now, their next window will be junior year

Email Rob Holub (<u>rholub@newhaven.edu</u>) to learn more.



### **UNewHaven Academic 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), MathZone
- 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

## **UNewHaven Support Resources**

- 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
- Death of family member, or illness that needs doctors note for missing class: Dean of Students Office
- Don't know where to start: TCoE Associate Dean
- Report bias, inappropriate conduct, etc.: Report It forms or Dean of Students
- Supplies available for check-out from Dean's Office: Graphing and Non-Graphing Calculators, Padfolios (for interviewing), Arduino Kits, Laptops\*

# **College Professionalism- Courses**

#### Courses

- Attendance is expected, even in "remote" courses
- Cameras may be used for participation, exams, etc.
- Have policy/procedure/format questions? Check the syllabus first!
- You are responsible for your own education: track the assignment deadlines, review grades and feedback, and ask for help early and often

#### 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.
- Note we cannot discuss academic grades or educational records with family members unless FERPA release is signed each academic year.

# **College Professionalism- Emails**

#### **Emails**

- Most university communication is via email. Excuses of "I didn't see the email," don't count in college. Start a habit of checking your email every day!
- Address emails to Professor X or Dr. X (avoid Mr., Ms., Mrs., or FirstName)
- Check spelling and write in complete sentences before sending an email
- Most faculty members respond within 24 hours, but it isn't instant.
   Weekend and Summer responses vary.
- Use the university contact list in Outlook to find an email address for a student, faculty, or staff.
- You are responsible for ensuring the privacy of your email address and account access. You should not be sharing your email password with your parents or having them send emails through your email on your behalf.

# **Student Questions**

Practice asking questions now!!

This is your time, what didn't I cover that you have questions about?



## **Study Abroad in Engineering**

Spring 2025 Cohort: First Year Students will continue to take math, science, and engineering or computing courses and stay on track to graduate.

Explore another country, embed yourself in another culture, and enhance your learning experience.

Next steps: start your application!

<u>Prato Semester application</u>







My favorite memory from my time in Prato is when I climbed to the top of the dome of the Duomo (Cathedral) of Florence. We climbed over 450 steps to see the amazing view of the city.

Everyday during the summer, I used our snack vouchers to get gelato. I was able to try all 15 flavors!

Prato has a rich Italian scientific history such as the inventions of Galileo and Leonardo, and the chance to go to specific museums in Florence to see more about them. I went to the Leonardo De Vinci museum and got to see the sketches from his codices made into real life prototypes. I loved my semester in Prato so much, I went back to be an RA this summer!



# 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:

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Associate Dean, TCoE

sgillespie@newhaven.edu





# TAGLIATELA COLLEGE OF ENGINEERING (TCOE)

**FOR FAMILIES** 

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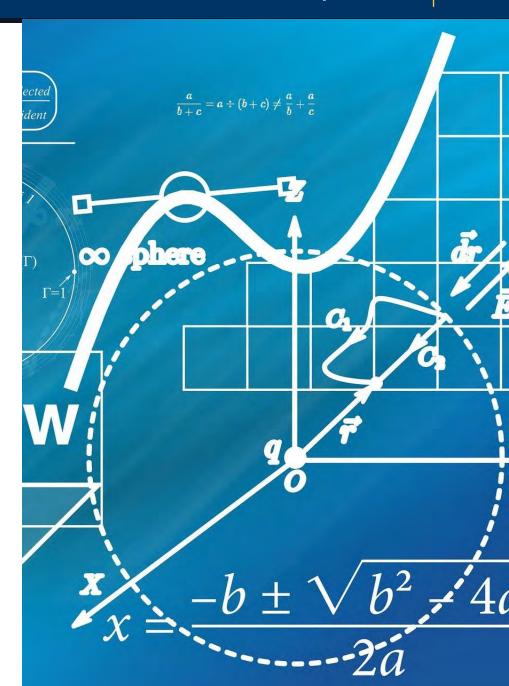
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Academic Advisors	Provide academic advice for course selection, career advice, or help navigating our university system.

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Helping your student understand college course responsibilities

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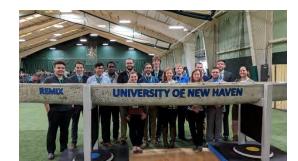
- · ACS (Chemistry)
- · AIChE (ChemE)
- · ASCE (Civil)
- · ASME (MechE)
- Engineers Without Borders (EWB)
- · IEEE (ElecEng.)
- · IISE (Ind. & Syst. Eng)
- · Robotics Club
- · Hacking Team

#### Honor Societies

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

#### General Opportunities

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- Engineering Student Ambassadors
- EASC Course Peer Assistants
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   Start building connections this summer!

Signup link: <u>bit.ly/NHFYEmentee</u>

Note this program is separate from the mentoring program sponsored by the Myatt Center for Diversity and Inclusion.

## 3 tips to support your student:

Students resist asking for help.

• Encourage them to visit faculty, the CLR, or peer assistants for help if they begin to struggle academically.

Students don't get involved, missing out on making friends, study groups, and meeting faculty.

• We recommend they join 1-2 student organizations in their first semester, ideally a TCoE student org

Students feel like no one cares because their professors/advisors don't respond to email immediately

- Plan ahead: allow at least 2 business days for email responses
- Schedule meetings directly, stop by their office, or call their office number





# Keeping in Touch

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