





STUDENT ORIENTATION ADVISING & REGISTRATION







Tagliatela College of Engineering (TCoE)

# **College Overview**

Office of the Dean	Chemistry and Chemical Engineering and Biomedical Engineering Department (CCM)	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
Dean Ron Harichandran	<b>Chair: Dr.</b> Dequan Xiao	Chair: Dr. Byungik Chang	Coordinator: Professor Eric Brisart	Chair: Dr. Ali Golbazi	Chair: Dr. Kagya
Associate Dean Stephanie Gillespie Assistant to the Dean: Paula Hackenjos	BS Chemistry	BS Civil Engineering	BS Engineering	BS Electrical and Computer Engineering	Amoako
	BS Chemical Engineering	Sustainability Minor	EASC courses	BS Computer Science	BS Mechanical
	MS Biomedical Engineering (Dual Degree)	Environmental Engineering Minor	Entrepreneurial Mindset in STEM Certificate	BS Cybersecurity and Networks	Engineering

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

### **Engineering Students**

Introduction to Engineering

Calculus 1

General Chemistry 1 or Physics 1

Seminar in Academic Inquiry and Writing

Introduction to Communication

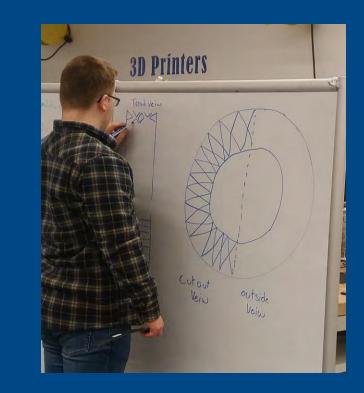
### Computer Science and Cybersecurity & Networks Students

Introduction to Computing Introduction to C<sup>++</sup> Programming Seminar in Academic Inquiry and Writing Pre-Calculus or Calculus 1 Core Curriculum Course





# First Semester Curriculum





#### 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.



# 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 gnide 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**

## **Math Matters**

All of our programs utilize math early and often. Placement tests aim to assess your prior knowledge so you don't start in a course too easy, or too challenging

- 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 placement? You can:
  - Make sure we have your AP test results or college class transcript
  - If MATH 1110 placement, enroll in the Summer Bridge program. Check your email for details.
  - Study the available course materials online for MATH 1107/1110, and take your challenge test (August 2nd).
  - 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. For more guidance on purchasing your computer go <u>here</u>. Note we do not recommend the 2021 MacBook Pro with Monterey OS due to a chip memory-leak issue that causes issues with some necessary 3<sup>rd</sup>-party software.

#### **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, but expect delays
- Review your academic worksheet or degree audit for previous 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
 Verall
 Verall
 Verall

- Confirm your faculty 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.



### 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.





#### SIGN UP FOR A PEER MENTOR TODAY NEW HAVEN FIRST YEAR MENTORSHIP PROGRAM

Mentoring Program Exclusive to the Tagliatela College of Engineering

#### As a UNewHaven student, you have access to a trained mentor to discuss topics such as:

- UNH opportunities such as student organizations and activities
  Balancing school, work, and personal life
  Academic advice such as course selection

- · Helpful school resources available to you

#### Who is your mentor?

Your mentor is a peer in the College of Engineering who will provide one-on-one support as you complete your studies.

#### SIGN UP FOR A MENTOR TODAY:

bit.lv/NHFYEmentee



"I want to be able to be there for someone if they need it. I want to be able to tell someone that I am there for them and have them know that I mean it no matter what." - New Haven Student Mentor

# Tips for being a successful engineering student from Day 1

# Differences between high school and college

	In High School	In College
Class time expectations	You are general introduced to content during class time	You are often expected to read or watch videos in advance of coming to class, where you will discuss content in depth
Homework and studying expectations	You will be given homework regularly, and often have class time to start working on it	Homework is almost always outside of class. Plan for at least 6 hours of outside of course time for study/homework per class
Asking questions	You usually have time during class to ask questions	If a class is busy, you may need 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 chances to re-submit your homework or re-take an exam.	A low grade stays in your grade calculation. You should be studying BEFORE you get 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.

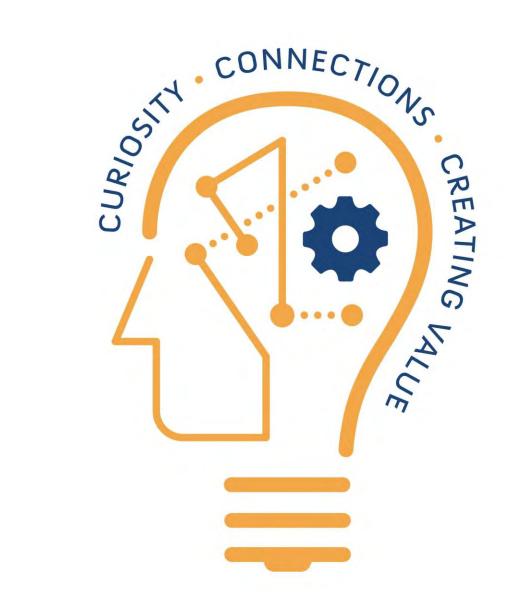


## **Entrepreneurial Mindset Certificate in STEM**

- 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



Interested? Email Dr. Gillespie at sgillespie@newhaven.edu to get updates and info.

# Your four-year college to career plan

#### First Year:

- Engineering LLC
- Intro courses
- Get involved in student organization
- Begin meeting 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** <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\*

# **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 2024 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 now!

Prato Semester application



ANNIE DENGLER '21 Major: Civil Engineering Study Abroad: Prato, Italy



#### "Best experience of my life.

My favorite thing I did while studying abroad was Skydiving over the Swiss Alps. It was definitely the craziest but most exhilarating thing I've ever done in life. I thought I was gonna die but I'm still alive to tell the story and send you this picture. Switzerland is absolutely gorgeous and to be able to view it all from the sky was absolutely incredible."



# Keeping in Touch

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







Tagliatela College of Engineering (TCoE) for Families

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Resource	What they provide
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Academic Advisors	Course selection, career advice, and help navigating university system

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#### Fourth Year

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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





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