

# College of Engineering and Physical Sciences Computer Engineering

**FOURTH YEAR FIRST YEAR THIRD YEAR SECOND YEAR** 

#### PLEASE NOTE: ACADEMIC COURSE SELECTION CHANGES RAPIDLY. MAKE SURE YOU ARE USING DEGREEWORKS AND MEETING WITH YOUR ACADEMIC ADVISOR REGULARLY.

Begin your program sequence with Perspectives in Electrical and Computer Engineering and your other required 400 & 500-level ECE & CS courses.

Begin your math sequence.

Begin Discovery program electives, including First Year Writing and either Principles of Economics or Environmental and Resource Economics Perspectives.

Continue your program sequence with your 500 level ECE & CS courses.

Continue your math sequence.

Continue with your Discovery program electives.

Begin your science sequence.

Continue your program sequence with 500 & 600 level ECE courses.

Continue your Discovery program

Continue your math sequence if needed.

Complete your program sequence 700 level ECE courses including Senior Project I & II.

Complete professional electives with the support of your program advisor.

Complete Discovery program electives.

FAST TRACK YOUR PROFESSIONAL SKILLS BY PRESENTING YOUR RESEARCH, PROJECTS, AND CAPSTONE/THESIS EXPERIENCES AT THE UNDERGRADUATE RESEARCH CONFERENCE-INTERDISCIPLINARY SCIENCE AND ENGINEERING SYMPOSIUM

### WILDCAT WAY TO PROFESSIONAL SUCCESS

# **BUILD AWARENESS**

Identify your interests, skills, and values

Career and Professional Success staff can provide assessment tools to help with the exploration process

Learn about your field of interest: industry areas, job types/titles, growth projections Review O\*Net, the Bureau of Labor Statistics, Potential Careers for your Major pages, Vault, and Pathsourc

Map your skills to industry needs

h job descriptions; indeed.com, LinkedIn, and company specific pages to learn what skills are in demand

Understand the career paths of fellow students and alumni

Join Wildcat Connections, review alumni LinkedIn profiles, UNH Today, and college websites for alumni stories

Understand salary ranges for your industry
Search Salary.com, Glassdoor, O\*Net, and the Bureau of Labor Statistics to find ranges for roles in your industry

# BUILD **PROFESSIONAL IMAGE**

Create and update career documents

Create and practice your professional pitch

 $Take\ part\ in\ the\ Career\ Story telling\ workshop\ series\ with\ the\ College\ of\ Liberal\ Arts\ CaPS\ team$ 

Develop your LinkedIn profile

Practice interviewing for your specific industry/field and professional goals

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Cultivate your professional image

ss, learn industry specific etiquette, and review your digital presence (social media and web search results)

#### **ACADEMIC**

Engage in research and field experience

Take the Jackson Career Explorer, Skills Scan, or Values Card Sort (available through Career and Professional Success)

Publish your research and papers

Submit your research to psychology specific journals

Present at professional conferences and competitions

Take part in the Undergraduate or Graduate Research Conference

Secure a Teaching Assistant , Lab Assistant, or tutoring position Take on a leadership or service position within your department to support your peers

Study away to build your national and global citizenship

Find the right program for you with National Student Exchange, Semester in the City, Education Abroad, etc.

Consider submitting your research to appropriate engineering and science journals Take part in the Undergraduate or Graduate Research Conference as well as any department poster session

## BUILD **EXPERIENCE**

#### CO-CURRICULAR

Learn about all of the resources available on campus

Explore the A-Z Resource Guide on unh.edu to see all UNH has to offer

Volunteer to support your local or global community

UNH Civic and Community Engagement

Join and participate in clubs and/or student organizations

Find through the Office of Student Involvement and Leadership, academic organizations, and Campus Recreation

Pursue student leadership positions

Apply to be a Resident Assistant, take a leadership position in an organization, run for student government

#### **PROFESSIONAL**

Shadow professionals and companies of interest

Use Wildcat Connections or campus connections to build relationships and request job shadowing experiences

Secure at least one internship

Search through Wildcat Careers, established Psychology internship opportunities, or other connections to find options

Get a part-time job to build other transferrable skills Attend the Local and On-Campus Student Job Fair, inquire with campus departments, or local businesses

Search through Wildcat Careers, Indeed.com, and pay attention to department and career weekly emails

**BUILD RELATIONSHIPS** 

	Build professional and personal networks
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Connect with alumni, faculty, staff, employers, supervisors, parents, friends, friend's parents, etc. Create a profile on Wildcat Connections, join national associations, and expand your LinkedIn connections

Attend employer events on campus and in the community

Resume Review Days, Career and Internship Fairs, employer tabling, information sessions, employer and alumni panels

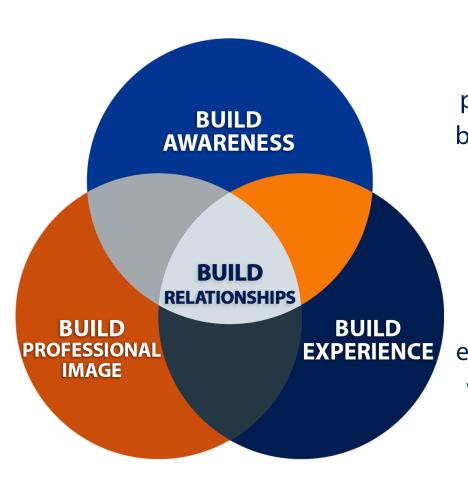
Conduct informational interviews

Meet with a variety of professionals from desired industry/organizations to hear their career stories and advice

Secure 3-5 professional references Connect with a combination of appropriate employers, faculty, staff, and/or supervisors

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## **WILDCAT WAY TO PROFESSIONAL SUCCESS**



At the University of New Hampshire, students develop personal and professional skills by following the Wildcat Way to Professional Success. This model is designed to provide guidance and recommended action steps throughout the UNH experience, equipping students with the knowledge and tools to thrive in an ever-changing future.

## **EXPERIENTIAL LEARNING**

Learning happens not only in the classroom and on campus, but also, and equally as important, through handson interactions and engagement with industry, national labs, NSF-REUs, and other organizations and partners. Experiential learning helps students to "connect the dots" and explore the link between academic interests and potential career paths. Students participate in experiential learning at a variety of sites, including:

Aquabotix **BAE Systems Dycom Industries** General Dynamics Electric Boat **Kepware Technologies** Teradyne

### **GRADUATE SCHOOL**

Graduates from the CEPS Class of 2017 enrolled in masters and doctoral programs at the following institutions:

University of New Hampshire Clemson University Colorado State University **Duke University** Rensselaer Polytechnic Institute **Stanford University Technical University of Munich** Texas A&M **Tufts University** University of Colorado Boulder University of Michigan

## **POTENTIAL CAREERS**

## Computer Engineering

Employment of computer hardware engineers is projected to grow 5 percent from 2016 to 2026, about as fast as the average for all occupations. A limited number of engineers will be needed to meet the demand for new computer hardware because more technological innovation takes place with software than with hardware. However, demand may grow for hardware engineers as more industries outside of the computer and electronic product manufacturing industry begin to research and develop their own electronic devices. Thus, although declining employment in the manufacturing industries that employ many of these workers will impede the growth of this occupation, computer hardware engineers should be less affected than production occupations because firms are less likely to outsource this type of work.

An increase in hardware startup firms and the ongoing increase in devices with computer chips embedded in them, such as household appliances, medical devices, and automobiles, may lead to some job growth for computer hardware engineers. Potential careers include, but are not limited to:

- Computer Engineer
- Computer Hardware Engineer
- Software Engineer
- Application Specific Integrated circuit (ASIC) design Engineer
- Fiber-Optics Network Designer
- Hardware Circuit Board Design
- **Network Test Engineer**
- **Network Systems Engineer**