

CAREER GUIDE

Engineering Career Resource Center
230 Chrysler Center

ENGINEERING
CAREERS

BY 12TWENTY



MICHIGAN ENGINEERING
UNIVERSITY OF MICHIGAN

CONTENTS

4

STUDENT SERVICES

10

RESUMES, CVs AND
COVER LETTERS

26

JOB SEARCH

38

INTERVIEWS

48

EVALUATING
OFFERS

51

GRADUATE
SCHOOL



Engineering Career Resource Center

230 Chrysler Center
2121 Bonisteel Boulevard
Ann Arbor, Michigan 48109-2092
career.engin.umich.edu

General Questions:

(734) 647-7160
ecrc-info@umich.edu



STUDENT SERVICES

Our Commitment

The Engineering Career Resource Center (ECRC) supports College of Engineering students in their career exploration and job search process. We offer comprehensive career development services to support our students' successful transition from campus to career. We are passionate about providing excellence, innovation, and integrity through our services and relationships.

Our Expertise

We encourage you to pursue activities and organizations that interest you during your time at Michigan. These experiences will help you develop skills that will prepare you for your future career. Throughout your exploration, we will help you reflect on your successes and challenges and teach you to communicate them in a meaningful way to recruiters, researchers, and others with whom you would like work!

Your Responsibility

All students who engage in recruiting activities are bound by the ECRC Job Search Code of Ethics, which asks that you:

- Act in good faith
- Honor your commitments
- Preserve your integrity and ours
- Show respect and concern for employers in the process
- Discontinue interviewing once you have accepted an offer

Be sure you read it carefully and understand its intent before you check the box.

career.engin.umich.edu/career/job-search-policies

Invest in your career development by:

EXPLORING
opportunities

PREPARING
for the job search

CONNECTING
with people

EXPLORE

Learn About Exciting Careers

- Networking Events
- Office Hours
- Career Fairs
- Job Postings (*Engineering Careers, by 12twenty*)

- Get to know company reps (often alumni)
- Learn about interesting companies
- Ask questions about jobs that interest you
- Read job postings to understand requirements

PREPARE

Get ECRC Advice and Expertise

- Meet with a Career Advisor
- Connect with a Peer Advisor
- Attend an ECRC workshop

- Learn employer expectations for successful candidates
- Discover best practices for demonstrating your value in person (networking events, interviews) and in writing (resume, cover letter, email)
- Find job leads and networking tips
- Pursue activities that help you develop core skills

CONNECT

Achieve Success in Your Search

- Make a positive impression
- Get the interview
- Land the job
- Evaluate offers

- Deliver a memorable elevator pitch
- Submit targeted resume that connects YOU to the JOB
- Demonstrate your interest in and ability to perform the job

WHAT'S YOUR CAREER PATH

Everyone has a unique career path. As your journey begins, focus on YOUR individual career trajectory. Below are some recommendations on how to effectively utilize the ECRC's resources during your time as a Michigan Engineering student, as well as a general recruiting timeline for fall and winter semesters.

How to Utilize the ECRC

Beginning Your Career Search

- Research a variety of industries, companies, and positions to explore potential interests.
- Seek out informational interviews with professionals. See page 34.
- Attend ECRC workshops on a variety of topics: Introduction to Resume Writing, Strategies for Career Fair Success, and Interview Preparation Workshop.
- Participate in Engineering Career Fairs to learn more about the recruitment process.
- Schedule career advising appointments to learn about the ECRC and job search strategies.

Seeking Your First Position

- Prepare and practice your elevator pitch. See page 31.
- Schedule ECRC career advising appointments to review your application materials.
- Apply to positions on Engineering Careers, by 12twenty and company websites.
- Attend recruitment events to engage with employers and learn more about specific positions.

Preparing for the Interview

- Research the company's annual reports, financial outlook, and funding priorities; mission, values, and vision; history; locations; current challenges and opportunities; industry and industry challenges; competitors, etc.
- Prepare answers to common interview questions. See page 43.
- Schedule a mock interview and/or interview preparation advising appointment with an ECRC Career Advisor.
- Send a "thank-you email" within 24 hours of the conclusion of the interview. See page 46.

Consider Job Offers

- Learn about a company's culture and consider whether it is a good fit for you. See page 45.
- Research your offered salary and benefits package to see if it is in line with industry standards. See page 48.
- Attend an Evaluating Offers advising appointment
- Read the ECRC's Job Search Policies: career.engin.umich.edu/career/job-search-policies

RECRUITING TIMELINE



GETTING STARTED

ENGINEERING CAREERS

BY  12TWENTY

Engineering Careers, by 12twenty is the career portal for all College of Engineering and computer science and data science students. This portal provides students with access to the highlighted features below, review the 12twenty Student Toolkit at <https://career.engin.umich.edu/12twentyToolkit> for additional details.



Documents

Upload documents under the Application Materials section of your Profile for easy access when applying to full-time, internship, or co-op opportunities.

- Resumes
- Cover Letters
- Copy of Your Transcript



Job Postings & Interviews

Utilize this section to search for full-time, internship, & co-op opportunities.

- Utilize filters to meet your search criteria, such as City or Type of Job
- Be sure to follow the Application Methods instructions
- Search for companies of interest in the Employers tab

Resource Library

ECRC resources for students are included in this section and arranged by topic. Use the Resource Library to find information on all career related topics, along with Major Information Sheets and company lists from previous events.



Career Advising Appointments

Schedule a Career Advising Appointment by selecting Appointments on the navigation menu.

- Introduction to the ECRC
- Resume/CV Review
- Cover Letter Review
- Job Search Strategies
- Interview/Career Fair Preparation
- Evaluating Offers
- General Career Advising



Events

Browse the Events section to find out about upcoming events including:

- Career Fairs
- Networking Events
- Career Workshops
- CoE Internship/Co-op Seminars
- Career Events hosted by Employers and Student Organizations

Resume Books

Resume books help maximize your visibility with employers. Students are encouraged to regularly search and apply to job postings of interest, in addition to opting in to resume books, since access to resume books is limited to employers participating in the ECRC Corporate Partner Program and special events.

WHICH CAREER PORTAL IS RIGHT FOR ME?

Companies that are looking to hire Michigan Engineering students will post their job opportunities in **Engineering Careers, by 12twenty** and collaborate with the ECRC on recruitment events. The ECRC recommends using **Engineering Careers, by 12twenty** as your main job portal. However, Handshake and the services offered by the University Career Center are a great supplemental tool to your job search.

ENGINEERING CAREERS

BY  12TWENTY

Engineering Careers, by 12twenty is the primary career portal for Michigan engineering, computer science, and data science students.

Engineering Careers houses an abundance of employers looking to hire Michigan Engineering students.

You can use Engineering Careers to:

- Sign up for a career advising appointment
- Learn about ECRC workshops and career events
- Research careers
- Apply to full-time, internship, and co-op opportunities

Handshake

Students from all U-M schools and colleges are able to take advantage of the University Career Center's (UCC's) resources. UCC connects students with employers interested in recruiting from a range of academic areas for their positions.

As a U-M student it is important to leverage all of your resources. Handshake is UCC's online platform for finding jobs and internships and for connecting with employers and staff.

Find opportunities to connect with employers:

- Jobs and internships in fields within and beyond engineering (for example: consulting, finance, environment, government, nonprofit)
- Employer-sponsored events such as recruiting information sessions, webinars, or special on-site employer visits

Find UCC Resources:

- All UCC-sponsored events including Employer Challenges, Immersion trips, Internship Labs, and other workshops
- Access to preparation help for pre-health students
- And more! Check it out at umich.joinhandshake.com

To connect with U-M alumni interested in helping you explore and reach your goals, visit UCAN (umich.peoplegrove.com)

GET STARTED...BECOME CAREER READY

Developing professional competencies is just as important as excelling academically. By engaging in opportunities on and off campus, you can build a foundation of professional skills that will help you in the job search and your future career.



Critical Thinking and Problem Solving

- Engage fully in each core course taken
- Brainstorm solutions before asking questions
- Pursue research experiences with faculty



Leadership

- Get involved in an engineering-focused student organization
- Take a lead role in a class project
- Volunteer to take on new tasks in the workplace



Oral and Written Communication

- Attend resume drop-ins; prepare a cover letter
- Seek opportunities to present
- Complete a mock interview at ECRC



Career Management

- Schedule an appointment with a Career Advisor
- Attend career fairs and career events
- Conduct an informational interview



Teamwork and Collaboration

- Join associations and competition teams
- Effectively partner with workplace staff
- Share responsibility on class projects



Global and Intercultural Fluency

- Study abroad and seek international internships
- Participate in diversity initiatives on campus
- Expand awareness of cultural norms



Digital Technology

- Develop your LinkedIn profile and digital identity
- Navigate Engineering Careers
- Pursue advanced training in industry platforms



Professionalism and Work Ethic

- Complete internships and industry design projects
- Build a professional wardrobe
- Maintain a positive attitude

Adapted with permission from The National Association of Colleges and Employers.

Movers of the world / **Makers** of the future



There's more than one road to your future. And to be honest, having it all mapped out at the time of graduation isn't as common as you may think. The Ford College Graduate rotational program gives you the opportunity to explore various roles throughout the business, helping find what you love and what to leave in the rearview mirror.



Scan the QR code to learn more about our FCG program or to view open career opportunities.

Optiver 

Driven by technology,
powered by people.

Accelerate your future at Optiver.
Check out our internship and graduate programs today.

Learn more at optiver.com



RESUME WRITING FOR IMPACT



Pass the 20-second scan!

Recruiters quickly scan resumes looking for evidence of your skills, abilities, and achievements related to their hiring needs. *The 20-second scan represents the time it takes a recruiter to decide whether to pursue or pass.*

How do I convey that I am the Ideal Candidate?

Top 4 “Must Haves” to Stand Out

1. Demonstrate required transferable skills (Career Readiness Skills – see page 8)
2. Provide evidence of technical qualifications (degree, computer skills, certifications, machining/fabrication, etc.)
3. Highlight accomplishments, contributions, and problems solved
4. Showcase non-technical jobs, extracurricular activities, and other unique experiences

Uncover Your Impact

For each of your experiences, ask yourself:

- How did I contribute to the group, organization, or team?
- What was the result or outcome of my effort?
- How did the organization benefit from the work I did?
- What impact did I have on the projects I was a part of?
- Can I quantify my impact?

Develop Strong, Positive Impact Statements

Create concise, action-oriented achievement (impact) statements that demonstrate your skills to perform the job.

Formula for Success: Impact Statements



Bullet Point Format

- **Action:** What did you do? (Use action verb)
- **Context:** How did you do it? (Define skills, tools, programs, complexity, or environment)
- **Result:** Why did you do it? (Explain the purpose of your effort)

Examples of Impact Statements

RETAIL SALES CLERK

BEFORE

Replenished stock in assigned areas

Assisted customers with merchandise questions

AFTER

Created visually appealing and accessible merchandise displays to enhance customer experience and increase sales

Studied store layout and merchandise placement in order to assist with frequent customer inquiries

COURSE PROJECT

BEFORE

Worked in a group to research knee joint replacements

AFTER

Researched the history, physicalities, and development of knee joint replacements to identify an opportunity to improve implant functionality with four other team members

ACTION VERBS FOR YOUR RESUME

Adapted with permission from the Career Guide of Texas A&M University

MANAGEMENT SKILLS

Administered	Chaired	Delegated	Established	Increased	Motivated	Produced	Scheduled
Analyzed	Consolidated	Developed	Evaluated	Initiated	Organized	Recommended	Strengthened
Assigned	Contracted	Directed	Executed	Instituted	Planned	Reorganized	Supervised
Attained	Coordinated	Enhanced	Improved	Managed	Prioritized	Reviewed	

COMMUNICATION SKILLS

Addressed	Contacted	Drafted	Formulated	Mediated	Persuaded	Reconciled	Spoke
Authored	Convinced	Edited	Influenced	Moderated	Promoted	Recruited	Translated
Collaborated	Corresponded	Elicited	Interpreted	Negotiated	Publicized	Resolved	Wrote
Composed	Directed	Explained	Lectured				

RESEARCH SKILLS

Analyzed	Compared	Diagnosed	Extracted	Interpreted	Located	Reviewed	Surveyed
Clarified	Conducted	Evaluated	Gathered	Interviewed	Organized	Solved	Systematized
Collected	Critiqued	Examined	Identified	Investigated	Researched	Summarized	Tested

TECHNICAL SKILLS

Adapted	Built	Designed	Engineered	Maintained	Programmed	Replaced	Studied
Applied	Calculated	Developed	Fabricated	Operated	Remodeled	Standardized	Upgraded
Assembled	Computed	Devised	Installed	Overhauled	Repaired	Solved	Utilized

TEACHING SKILLS

Adapted	Communicated	Enabled	Explained	Guided	Informed	Persuaded	Trained
Advised	Coordinated	Encouraged	Facilitated	Individualized	Instructed	Stimulated	Tutored
Coached	Developed	Evaluated	Focused				

FINANCIAL SKILLS

Administered	Appraised	Budgeted	Developed	Forecasted	Marked	Projected	Reduced
Allocated	Audited	Calculated	Estimated	Managed	Planned	Reconciled	Researched
Analyzed	Balanced	Computed					

CREATIVE SKILLS

Acted	Created	Directed	Founded	Instituted	Invented	Performed	Revitalized
Adapted	Customized	Established	Illustrated	Integrated	Modified	Planned	Shaped
Composed	Designed	Fashioned	Initiated	Introduced	Originated	Revised	Solved
Conceptualized	Developed						

HELPING SKILLS

Advocated	Assisted	Counseled	Educated	Facilitated	Motivated	Rehabilitated	Supported
Aided	Clarified	Demonstrated	Encouraged	Familiarized	Intervened	Represented	Volunteered
Assessed	Coached	Diagnosed	Expedited	Guided	Referred	Resolved	

CLERICAL/DETAIL SKILLS

Approved	Coded	Executed	Monitored	Processed	Reviewed	Specified	Tabulated
Arranged	Collected	Generated	Operated	Purchased	Routed	Screened	Updated
Catalogued	Compiled	Implemented	Organized	Recorded	Scheduled	Standardized	Validated
Charted	Dispatched	Inspected	Prepared	Retrieved	Set up	Systematized	Verified
Classified	Distributed	Maintained					

MORE VERBS OF ACCOMPLISHMENT

Achieved	Completed	Improved	Reduced	Restored	Succeeded	Transformed
Awarded	Expanded	Pioneered	Resolved	Spearheaded	Surpassed	Won



DO YOU WANT YOUR RESUME TO STAND OUT?

A resume provides a CLEAR, CONCISE, CONSISTENT and CUSTOMIZED summary of your background that should inspire the employer to want to meet you. The following tips will assist you in achieving success!

Clear

- Write in present tense for experiences you are currently doing
- Use reverse chronological order within each section
- Dates should be in month/year with the month spelled out or abbreviated
- Allow for white (blank) space to exist in between your sections — your document has to be readable

Concise

- Use a variety of strong action verbs to start your impact statements
- Use acronyms carefully; is the acronym known to your intended audience?
- Impact statements should be 1 – 2 lines

Consistent

- Apply **bold**, *italics* and underlining consistently throughout your document
- Be consistent with capitalization and punctuation
- Use margins between 0.5 – 1 inch
- Use the SAME font type and size (10 – 12pt) throughout – only your name should be slightly larger!

Customized

- Your resume should demonstrate the skills and experiences related to the job you are applying for
- Include language in your resume that is used in the job posting.



Include your GPA! Most employers will want to know your GPA eventually and expect that it will be on your resume. If your GPA is above a 3.0 on a 4.0 scale, you should include it. It may even be a good idea if it is under 3.0. Contact the ECRC to speak with a Career Advisor if you have questions regarding your personal GPA for the best advice for your situation.



Include personal information such as UMID, photos, icons, race, age, sexual orientation, religion, political affiliation or marital status.

Key Resume Sections

EDUCATION

Institution, location
Degree, Minor & Expected
Grad Date
GPA
Coursework
Study Abroad Experience

EXPERIENCE (TYPE OF)

Work Experience
Internship Experience
Project Experience –
Academic, Team or
Independent
Academic Experience
Research Experience
Leadership Experience
Volunteer Experience

SKILLS

Computer
Certifications
Languages
Fabrication
Training
Lab Equipment

OTHER RESUME SECTIONS TO CONSIDER

Activities
Professional Associations
Awards / Honors
Publications
Conference Presentations
Objective – Explains Your Intent
Summary – Overview of skills and experience related to a targeted role



What to Know About Applicant Tracking Systems

Applicant Tracking Systems (ATS) are used by many companies to process job applications and manage the hiring process. They are designed to save recruiters time by making applicant information easily accessible and digitally searchable. ATS allow recruiters to sift through the thousands of resumes they may receive utilizing various filters that they have identified to be important.

How can you ensure that your resume makes it through this system and into the hands of a recruiter? Keep the following tips in mind:

1. KEEP YOUR RESUME FORMAT SIMPLE

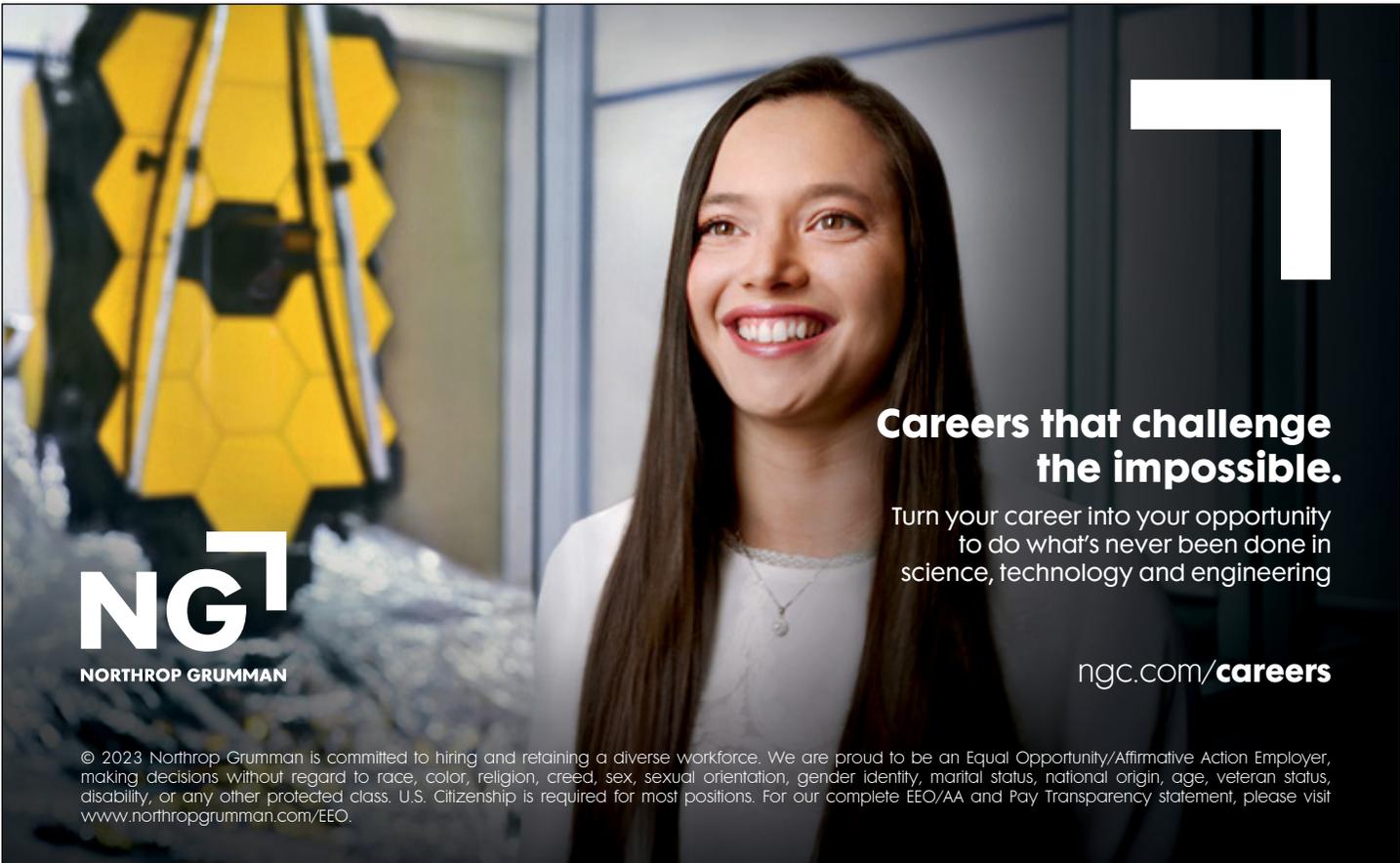
- Stick to standard resume formatting — avoid fancy fonts, logos, symbols, and shading.
- Use single-column layouts. There are several ATS that fail at reading multi-column resumes. If your education and work experience are side-by-side, the ATS might interpret your work experience as part of your education.
- Use familiar section headings such as Education, Experience, Skills, etc.
- Do not include images, pictures, diagrams, or tables.
- Be consistent in the formatting within each section of your resume.

2. MEET THE QUALIFICATIONS

- If you think you meet the qualifications described by the employer, your resume should detail that evidence.
- Customize your resume using keywords described in the job posting. Don't go overboard repeating keywords; 2-3 times will suffice.
- Utilize acronyms carefully. Consider using the spelled-out form followed by the acronym, then the acronym only if repeated.
- Do not force soft skills (communication, teamwork, etc.) into your resume by merely listing them. They mean little without evidence. Instead, try to convey these skills through your achievements.

3. FOLLOW APPLICANT DIRECTIONS

- Complete the online application process in the manner that is requested. Any deviation from what is required can be a reason to filter you out!
- Avoid skipping sections by using the phrase "see resume." While it may seem redundant to enter the exact information from your resume, some ATS use these fields to execute the search or ranking of your background.



NG
NORTHROP GRUMMAN

**Careers that challenge
the impossible.**

Turn your career into your opportunity
to do what's never been done in
science, technology and engineering

ngc.com/careers

© 2023 Northrop Grumman is committed to hiring and retaining a diverse workforce. We are proud to be an Equal Opportunity/Affirmative Action Employer, making decisions without regard to race, color, religion, creed, sex, sexual orientation, gender identity, marital status, national origin, age, veteran status, disability, or any other protected class. U.S. Citizenship is required for most positions. For our complete EEO/AA and Pay Transparency statement, please visit www.northropgrumman.com/EEO.



**HELP US SHAPE
THE FUTURE OF
MOBILITY**

Aptiv is a global technology leader addressing mobility's toughest challenges to make the world safer, greener and more connected. With more than 200,000 people in 48 countries, we offer unparalleled professional development opportunities for both interns and full-time employees.

AREAS OF SPECIAL INTEREST INCLUDE:

- Computer Engineering
- Computer Science
- Electrical Engineering
- Mechanical Engineering
- Robotics
- Systems Engineering

Together, let's change tomorrow.

Visit aptiv.com/careers for more information

• APTIV •



SAMPLE RESUME

STUDENT NAME

email@umich.edu • 734-647-7160 • Ann Arbor, MI

EDUCATION

University of Michigan **Ann Arbor, MI**
Bachelor of Science in Engineering in Industrial and Operations Engineering *April 2024*
 GPA: 3.08/4.00
 Coursework: Introduction to Optimization Methods, Introduction to Markov Processes, Linear Statistical Models, Lean Manufacturing and Services, Global Cultural Systems Engineering

Technische Universität Berlin **Berlin, Germany**
Study Abroad *May 2021 - August 2021*

- Completed coursework in Industrial Engineering and German language
- Participated in cultural and industrial excursions to understand intricacies of German culture and business
- Volunteered in local elementary school to teach English as a second language to students

WORK EXPERIENCE

Mataco, Inc. **Broadview Heights, OH**
Supply Chain Management Intern *May 2023 - August 2023*

- Coordinated transition to new brass wire supplier resulting in \$5,500 savings
- Standardized shipment process from new supplier to Mataco factories using lean manufacturing techniques
- Developed database tools to track inventory transported from new supplier to Mataco warehouses
- Presented 12 weeks of data analysis and recommendations at Mataco annual company meeting

PROJECT EXPERIENCE

University of Michigan **Ann Arbor, MI**
Analysis of Solar Power *January 2024 - Present*

- Examine use of solar power in residential and commercial areas to determine economic feasibility of environmentally friendly energy sources
- Compare costs of diverse solar cells, taking into consideration tax refunds and divergent energy outputs
- Compile results in formal report and presented findings to company CEO and leadership team for further study

Entrepreneurial Studies: Start-up Simulations *September 2021 - December 2021*

- Researched design options, material costs, competitors and market demand for wearable technology to determine optimal pricing and launch strategy
- Created a 5-year financial projection demonstrating product viability and pitched business plan to potential investors

LEADERSHIP EXPERIENCE

University of Michigan Alternative Spring Break **Ann Arbor, MI**
Site Leader *September 2021 - March 2022*

- Planned and facilitated an interactive 5-day service-learning trip to Gary, IN to volunteer in a domestic violence shelter
- Appropriated budget of \$10,000 for food, travel, and accommodations for 12 student volunteers
- Managed volunteer schedule to ensure sufficient staffing of all events and services at the shelter
- Acted as a liaison between shelter staff and students to facilitate successful communication between all parties

SKILLS

Computer: Excel, Access, VBA, SQL, Minitab, AMPL, Python, C++, MATLAB
Certifications: Lean Manufacturing Green Belt, Six Sigma Green Belt
Coursera Training: Data Analysis and Visualization Foundations Specialization, Foundations of Project Management
Languages: Proficient in German

ACTIVITIES

Alpha Pi Mu (Industrial Engineering Honors Society), *Member* *September 2022 - Present*
 Michigan Engineering Consulting Club, *Member* *January 2023 - May 2023*



SAMPLE RESUME

STUDENT NAME

(xxx) xxx-xxxx • email@umich.edu

SUMMARY	Multi-Disciplined Engineer equipped with innovative design solutions for multi-faceted projects including major OEMs. Experienced in machining processes, computer-aided design and database design platforms. Poised to provide technical direction and leadership to diverse teams in support of successful project rollouts.
EDUCATION	<p>University of Michigan, Ann Arbor, MI Master of Science in Engineering in Mechanical Engineering April 2024 GPA 3.64/4.00 Coursework: Auto Body Structures, Quality Engineering Principles, Intro to Systems Engineering, Hybrid & Electric Vehicles</p> <p>University of California, Los Angeles, CA Bachelor of Science in Materials Engineering April 2022 GPA 3.81/4.00 Coursework: Computer-Aided Design, Manufacturing Processes, Metallic Alloys, Polymers, Composite Materials, Ceramics and Glass, Mechanical Behaviors of Materials, Statics and Strength Materials</p>
EXPERIENCE	<p>Eaton Corporation, Tualatin, OR Engineering & Technology Intern (eMobility) June 2023-August 2023</p> <ul style="list-style-type: none"> • Modified power distribution unit (PDU) design for major OEM's next generation electric vehicle platform, increased busbar area by 35% and met packaging, creepage and clearance requirements • Researched and created connector selection guide and creepage and clearance calculation template for future applications <p>UCLA Institute for Technology Advancement, Los Angeles, CA Baseball Bat Research Assistant December 2020-June 2022</p> <ul style="list-style-type: none"> • Redesigned, machined and assembled a high-pressure ball cannon to meet new industry testing standard for measuring high speed bat performance (ASTM F2219) • Prototyped and tested polyurethane foam inserts of various densities for AXE Bat's Youth League bats and improved weight-efficiency of stiffening inserts by 25%
PROJECTS	<p>Multidisciplinary Design Program, BASF/Xenith Helmet Project Engineering Sub team Member January 2023-Present</p> <ul style="list-style-type: none"> • Design and built drop test fixtures to perform initial helmet PU foam testing and screening • Analyze stress-strain curves from data collected using UTM and high strain-rate drop test to characterize foam behavior <p>AIAA Rocket Project Structure Team Member/Project Team Leader September 2020-June 2021</p> <ul style="list-style-type: none"> • Collaborated with five team members to manufacture rocket body tubes using carbon fiber prepregs • Led the design and successful construction of vertical rocket stand
COMPUTER SKILLS	<p>Platforms: Windows Vista/7, Mac OS, UNIX: Solaris, HP-UX Languages: C/C++, MATLAB, Java, LabView Applications: SolidWorks, Simulink, Minitab</p>
ACTIVITIES	<p>Mechanical Engineering Graduate Council September 2022-Present University of Michigan Men's Rowing Team September 2022-September 2023</p>
LANGUAGES	Fluent in Mandarin

SAMPLE RESUME

FIRST YEAR STUDENT NAME

(xxx) xxx-xxx, email@umich.edu
2121 Bonisteel Blvd.
Ann Arbor, MI 48109

OBJECTIVE

Inquisitive undergraduate engineering student seeking to apply automotive interests in a summer 2021 internship focused on autonomous vehicle development.

EDUCATION

University of Michigan, Ann Arbor, MI
Bachelor of Science in Engineering April 2027

Mercy High School, Farmington Hills, MI
Diploma; GPA: 3.9/4.0 June 2023

LEADERSHIP

Mercy High School FIRST Robotics Team #1461, Farmington Hills, MI
Mechanical Team Lead August 2020 - May 2023

- Designed chassis of robot using CAD software then collaborated with programming team lead to ensure proper design requirements were met
- Machined parts for dynamic systems using a lathe, drill press, bandsaw by accounting for the forces and accelerations of a rigid body robot

EXPERIENCE

Mercy High School, Farmington Hills, MI
Science Tutor June 2021 - August 2023

- Led tutoring sessions for 15 students by communicating key concepts in smaller groups to facilitate a better understanding of biology, chemistry, and physics
- Adapted lesson plans for groups of five students based on their individual learning styles to foster deeper engagement with course material and better retention

Yofresh Frozen Yogurt Cafe, Brighton, MI
Yogurt Connoisseur June 2020 – June 2021

- Maintained welcoming store atmosphere by greeting customers and completing their orders at the cash register in a timely manner
- Recorded detailed list of closing shift responsibilities to standardize practice across all employees

ACTIVITIES

Women in Science and Engineering Residential Program (WISE RP), Ann Arbor, MI
Community Member September 2023 - Present

- Foster community within residence hall by participating in team building activities with 100+ community members
- Analyze scientific journal articles and presented key findings to a class of 15 WISE RP members

University of Michigan, Intramural Soccer, Ann Arbor, MI
Team Captain September 2023- Present

- Recruiter of nine peers to form a coed soccer team by utilizing social media and flyers to market the opportunity to the campus community
- Communicate with fellow captains in the league monthly to coordinate schedules and establish times for games

SKILLS

HTML, Microsoft Office, Windows, Mac O

SAMPLE RESUME CONTENT

Additional examples of how you can display education, experiences, skills, and impact statements on your resume are included below and on the next page.

Objective

Seeking a summer supply chain internship at Amazon, available May – August 2024

Seeking a summer 2024 environmental engineering internship with Siemens, specializing in water waste management

Seeking a full-time position as an electrical engineer, with a strong interest in VLSI design

Seeking a full-time position as a process or manufacturing engineer, specializing in quality control

Education

University of Michigan, Ann Arbor, MI

Bachelor of Science in Engineering in Aerospace Engineering

April 2024

GPA 3.0/4.0

Washtenaw Community College, Ann Arbor, MI

Completed 40 credits of general education curriculum

September 2020 - April 2021

GPA 3.8/4.0

University of Michigan, Ann Arbor, MI

Bachelor of Science in Engineering in Mechanical Engineering

April 2024

Bachelor of Business Administration

April 2024

University of Michigan, Ann Arbor, MI

Bachelor of Science in Engineering in Industrial & Operations Engineering

April 2024

Minor in Entrepreneurship, Engineering Honors Program

GPA 3.75/4.00

Experience

PROJECT EXPERIENCE

Multidisciplinary Design Program, NAME OF SPONSOR

Ann Arbor, MI

Team Member (or your title)

Jan 2023-Dec 2024

- Impact Statement
- Impact Statement

Better Living Using Engineering Laboratory (BLUE Lab)

Ann Arbor, MI

Woven Wind Financial Chair

Jan 2023-Present

Member

Sep 2021-Dec 2022

- Impact Statement
- Impact Statement

University of Michigan

Ann Arbor, MI

Entrepreneurial Studies: Start-up Simulations

Sep 2023-Dec 2023

- Impact Statement
- Impact Statement

WORK EXPERIENCE**University of Michigan, Multidisciplinary Design Program, NAME OF SPONSOR****Ann Arbor, MI***Team Member (or your title)**Jan 2024-Present*

- Impact Statement
- Impact Statement

Whirlpool Corporation**Benton Harbor, MI***WERLD Intern, Materials Technology - Cooking**May 2023-Aug 2023*

- Impact Statement
- Impact Statement

*Manufacturing Leadership Development Program Intern**May 2022-Aug 2023*

- Impact Statement
- Impact Statement

RESEARCH EXPERIENCE**Undergraduate Research Opportunity Program (UROP)****Ann Arbor, MI***Project Title: Modeling Buildings with Real-Time Videogrammetry**Sep 2023-Present*

- Developed a program in C to test the model's accuracy with campus buildings and recorded discrepancies for further analysis
- Presented weekly updates to graduate student mentor on discrepancies and strengths of the model and discussed potential improvements to the model's accuracy

Sample Remote Position**VMware****Palo Alto, CA***Research Intern (Remote)**May 2022-Aug 2022*

- Analyzed technical issues in client databases and developed an automated workflow using Python to improve processing time for end user
- Communicated with customer solutions team to identify common concerns and solutions and implemented feedback into customized workflows for their teams

Skills**Programming Languages:** Python, C++, C, MATLAB**Technologies:** AWS, React JS, Node JS, Vue JS, Docker, SQL, Flask**Sample Impact Statements**

Good	Great
<p>Big Three Automotive Inc., <i>Electrical Engineer, Steering Development Lab</i></p> <ul style="list-style-type: none"> • Designed the architecture and specifications for electromechanical hardware-in-the-loop test bench for Electronic Power Steering (EPS) • Implemented CAN communication capability for Steering Lab test stands • Developed procedure to measure energy consumption of electronic control modules 	<p>Big Three Automotive Inc., <i>Electrical Engineer, Steering Development Lab</i></p> <ul style="list-style-type: none"> • Designed the architecture and specifications for electromechanical hardware-in-the-loop test bench for Electronic Power Steering (EPS) to ultimately reduce dependence on in-vehicle testing • Implemented CAN communication capability for Steering Lab test stands, reducing dependence on supplier schedule and, consequently, the overall test time for electronic power steering systems • Developed procedure to measure energy consumption of electronic control modules to quantify system energy costs





Big Dreams. Tiny Tech.



KLA is hiring in Ann Arbor

KLA is proud to be part of the most significant technological breakthroughs.

Virtually no laptop, smartphone, wearable device, voice-controlled gadget or smart car would have made it into your hands without us.



We're looking for people like you to join our talented team of engineers, physicists, data scientists and other problem-solvers in Ann Arbor. If you have a passion for solving complex technical challenges, join us and help advance humanity.



Learn about KLA
in Ann Arbor



Apply now
kla.com/careers

THE CURRICULUM VITAE

What Is It?

A Curriculum Vitae, also called a CV, is a job search document that provides extensive information on an applicant's qualifications and background, often with a focus on academic and research related experiences. Whereas a resume should be limited to one or two pages, a CV may be many pages in length.

Who Needs One?

A CV is most often used by PhD candidates. The CV is frequently used for applying to positions in academia, national laboratories, or research focused organizations. PhD candidates who are applying for positions in industry may choose to utilize a resume instead of a CV. For most bachelor's and master's degree students, a resume is often more appropriate than a CV.

What to Include?

CVs are highly personalized depending on the candidate and the type of positions to which the candidate is applying. Be sure to customize the content and arrange the sections in the order that makes the most sense for your situation. Here are some common sections to include in a CV:

EDUCATION

List your degrees in reverse chronological order.

Include: Institution and location; Degree; Graduation date; Minors, concentrations, certificates, or areas of specialization
Optional (when relevant for research or academic positions): Dissertation or title of thesis, Advisor's name

EXPERIENCE

This section is one of the most important on your CV. The specifics will depend on the individual candidate, but this could include work and/or research experience. Note that if you have a significant experience that was of a long duration, you may have a lot of relevant information about it you'd like to communicate on your CV. Instead of a long list of bullet points under one experience, consider dividing the bullet points into themes or sub-projects under that experience.

Include: Name of organization and location; Title of position; Dates; Description of your responsibilities

PROJECTS

This could include academic projects, independent projects, as well as any related student project teams

TEACHING EXPERIENCE

This is an especially valuable section if you are interested in a career in academia.

PUBLICATIONS AND PRESENTATIONS

Depending on how many presentations or publications you have, you may want to list *Select Publications* based on relevance and/or consider dividing into categories.

ACTIVITIES

In addition to extracurricular activities, be sure to include membership in any professional associations and service or leadership experiences.

AWARDS, HONORS, AND/OR RECOGNITION

It is common to include recognition that candidates have received for their academic success. This is often common for CVs in Academia.

SKILLS

Highlight your technical skills and language skills in this section.

REFERENCES

References may be included as the final page of your CV.

Next Steps & Resources

- Research best practices for your preferred position/ industry/sector
- Consult with your faculty advisor or other specialists in your field of interest
- Utilize resources, such as the Center for Research on Learning & Teaching (CRLT) <https://crlt.umich.edu/cvs-and-cover-letters>
- Schedule a CV review appointment with an ECRC Advisor

Please Note: The sample CV on the following pages is for illustrative purposes only. Sections are condensed to accommodate space limitations within this guide.

A CV provides extensive information on **THE APPLICANT'S QUALIFICATIONS AND BACKGROUND**

Mitch Igan

(555) 555-5555 | mitchigan@umich.edu | 1201 S. Main St. | Ann Arbor, MI 48105

SUMMARY

Experienced biomedical engineering researcher with expertise in biomaterials, mechanobiology, and cell biology. Biotechnology and pharmaceutical industry experience focused on early-stage discovery and development of therapeutics for fibrotic diseases. Motivated and collaborative worker with a strong publication record and excellent communication skills, pursuing an industry postdoctoral research position in discovery oncology.

EDUCATION

University of Michigan **Ann Arbor, MI**
Ph.D. in Biomedical Engineering, Concentration in Biomaterials and Regenerative Medicine *December 2024*
Graduate Certificate in Innovation & Entrepreneurship *GPA: 3.93/4.00*
Thesis: Biomaterial Control of Cell Forces to Enable Intercellular Communication during Vasculogenic Assembly
Relevant Coursework: Artificial Intelligence in Biomedical Engineering, Cellular Biotechnology, Commercialization of Biomedicine, Technology-Inspired Business Models

University of Nebraska - Lincoln **Lincoln, NE**
Bachelor of Science in Biological Systems Engineering, Minor in Biomedical Engineering *May 2019*
Honors Program Scholar *GPA: 4.00/4.00*

RESEARCH EXPERIENCE

University of Michigan - Engineered Microenvironments and Mechanobiology Lab **Ann Arbor, MI**
Graduate Research Assistant *November 2019 - Present*
Advisor: Dr. Nigel Thomson

- Combine approaches from cell biology, materials science, and microfabrication to investigate how structure and mechanics of the cellular microenvironment regulate fundamental cell processes
- Investigate cellular interactions with their microenvironment in order to design biomaterials that direct the self-assembly of functional microvascular networks, and understand how the physical properties of the extracellular matrix regulate myofibroblast activation during fibrotic diseases
- Design and characterize natural and synthetic hydrogel platforms with tunable physical properties through polymer chemistry, electrospinning, and atomic force microscopy
- Perform 2D and 3D culture of various cell types including endothelial cells, fibroblasts, and induced pluripotent stem cells (iPSCs)
- Visualize data with confocal microscopy and write custom Matlab scripts for high throughput data analysis
- Utilize photolithography and soft lithography approaches to develop high throughput substrates that isolate single cells for analysis of cell behavior in user-defined microtissues
- Mentor three undergraduate researchers through one-on-one instruction in data collection and analysis

AbbVie Inc. **North Chicago, IL**
Experiential Intern – Discovery Dermatology and Fibrosis (Remote) *June 2023 – August 2023*

- Surveyed, evaluated, and proposed novel 3D cell culture platforms and techniques for *in vitro* modeling of idiopathic pulmonary fibrosis
- Organized and led biweekly internship group meetings to foster intern networking and cross-functional exposure

TEACHING EXPERIENCE

University of Michigan - Biomedical Instrumentation and Design **Ann Arbor, MI**
Graduate Student Instructor *August 2020 – December 2020*

- Instructed students on how to design and configure various biosensors to acquire physiological information from a living system, interface sensing devices to a digital acquisition system, and process experimental data for analysis
- Assessed student capabilities and needs to deliver customized tutoring and support student learning during weekly office hours

Mitch Igan - 1

PROJECT EXPERIENCE

miLEAD Consulting

Project Manager
Consultant

Ann Arbor, MI

June 2024 - Present

August 2022 – June 2024

- Managed a team of four consultants to provide early-stage and established organizations with rigorous analysis to inform and guide decisions towards advancing their products and services
- Developed a project plan, communicated directly with client, and maintained focus on final deliverables to ensure that project goals were met
- Conducted comprehensive primary and secondary market research to identify viable customer segments for a client's novel product or technology

University of Michigan – Biomedical Engineering Department

Artificial Intelligence in Biomedical Engineering: Research Report

Ann Arbor, MI

January 2023 – April 2023

- Analyzed a preexisting single cell RNA-sequencing dataset consisting of transcriptomes from 21,252 endothelial cells (each consisting of 14,917 genes) that were isolated from healthy and cancerous lung tissue
- Utilized Matlab to analyze properties of the dataset, conduct unsupervised learning approaches, and develop machine learning algorithms to identify unique genes that were differentially regulated as well as predict disease state based solely on endothelial cell expression levels

SKILLS

Lab Skills: 2D & 3D cell culture, Hydrogel Formulation, Mechanical Characterization, Confocal Microscopy
Immunostaining, Live Cell Imaging, Lentiviral Transduction, Western Blotting, Microfabrication
Computer Skills: MATLAB, ImageJ, GraphPad Prism, Adobe Illustrator, AutoCAD, Microsoft Office

PUBLICATIONS

1. **Igan MJ**, Rossi LF, Li MR, Ivanov MI, Garcia JG, Arbor AA. Mechanical intercellular communication via matrix-borne cell force transmission during vascular network formation. *BioRxiv* 2024.
2. Li MR, **Igan MJ**, Zhang WC, Arbor AA. Actomyosin contractility-dependent matrix stretch and recoil induces rapid cell migration. *Nature Communications* 2022; 10:1186.
3. Li MR, Taylor AP, Zhao S, Weber EL, Kornakova M, **Igan MJ**, Soto H, Zhang WC, Murphy SK, Leung Z, Nowak AK, Kalchik IN, Thomson, NA. Direct comparison of angiogenesis in natural and synthetic biomaterials reveals matrix porosity regulates endothelial cell invasion speed and sprout diameter. *Acta Biomaterialia*, in press.

FELLOWSHIPS AND SCHOLARSHIPS

National Institutes of Health Ruth L. Kirschstein National Research Service Award (Parent F31) 2023 - Present
National Science Foundation Graduate Research Fellowship 2023 - Present

HONORS AND AWARDS

Acta Student Award Finalist, *Acta Journals* May 2024
ASME-BED PhD Student Paper Competition 2nd place, *Summer Biomechanics Conference* June 2022

ABSTRACTS AND PRESENTATIONS

1. **Igan MJ**, Ivanov MI, Bianchi SA, Wilson DN, Tremblay SA, Thomson NA. Synthetic matrix fibers supports 3D endothelial cell network assembly in fibrin hydrogels. *BMES 2024 Annual Meeting*, Orlando, FL. October 6-9, 2024, poster.
2. Rossi LF, Martin MP, Esposito MA, **Igan MJ**, Jensen OW, Thomson NA. Mechanical cues drive the robust assembly of microfabricated stem cell-derived cardiac tissues. *2024 Summer Biomechanics, Bioengineering, and Biotransport Conference*, June 14-18, 2024, virtual presentation.
3. **Igan, MJ**, Thomson NA. Cellular communication via force propagation in fibrous microenvironments. *Engineering Graduate Symposium*, Ann Arbor, MI, October 26, 2022, poster.

Mitch Igan - 2

COVER LETTER FORMAT

General: Cover letters should not exceed one page in length and should be written for a specific position. Utilizing a generic cover letter to apply to multiple positions is not recommended.

When emailing: Insert your cover letter as page one of your resume and identify this in your brief email. Your email can simply state that you are interested in a specific position, you appreciate their consideration, and attached is your resume and cover letter.

Your name and address as they appear on your resume

Date

Contact Person, Title (if available)

Company Name

Address

City, State Zip

Dear Hiring Representative or Contact Person:

First Paragraph—Introduction

Establishes the purpose of your letter, explains why you are interested in the position, and states why the employer should be interested in you for the position (interests, previous experience).

- State why you are writing by naming the specific position and direct personal interest in the company/role.
- Insert a brief sentence that gives your degree, major, college affiliation, and graduation date.
- Consider including how you heard about the position/employer. (For example, mention the contact person from whom you learned about the position).
- Conclude this paragraph with the skills you plan to highlight in your letter.

Middle Paragraph(s)—Body (1–2 paragraphs depending on background)

Generates interest with content that demonstrates you have researched the company, and that you are able to align your skills and interests with the company as well as its offered position.

- Indicate how you can help the employer achieve organizational goals in your specialty. Focus on what you can do for them rather than why you want the position.
- Highlight your most significant accomplishments, abilities, and experiences that are specifically relevant to the employer and job requirements.
- DO NOT SIMPLY RESTATE YOUR RESUME. Rather, elaborate and explain important experiences and personal qualities that cannot be indicated on a resume.

Final Paragraph—Closing

Concludes your letter and states your commitment to action.

- Consider summarizing your skills and experiences by connecting them directly to the company and/or position.
- Indicate that you are grateful for their consideration, and look forward to connecting with them in the future.

Sincerely,

Student Name

SAMPLE COVER LETTER

STUDENT NAME

(xxx) xxx-xxxx • email@umich.edu

September 23, 2023

Amazon
123 Street Name
Seattle, WA 98109

Dear Amazon Hiring Representative,

I am writing to apply for the Business Analyst position with Amazon. I believe that my creativity and ability to efficiently solve complex problems are well suited to Amazon's culture of continuous innovation. I am intrigued by the opportunity to create efficient business processes as Amazon innovates, invents, and engineers on multiple fronts across a variety of industries. I am currently a junior at the University of Michigan studying Industrial and Operations Engineering and plan to graduate with my B.S.E. in May 2024. I am confident that I possess the project management and data analysis skills to be successful in this role.

In the summer of 2023, I worked as a Research Assistant at the Center for Ergonomics at the University of Michigan. In this role, I stepped in to continue the work that had been started to assist LG in improving their vacuum design as it related to customer usage. This involved designing a survey that participants would complete prior to taking part in a lab study. Information from this survey would enable the study to run more efficiently. I worked independently creating this survey; I was self-motivated and set goals along the way to ensure timely completion. The completed product was so well received by representatives at LG that they decided to utilize the survey nationally rather than locally, which had been previously planned.

I demonstrated my strong skills in analyzing and interpreting data this past semester in a Data Processing class. I was part of a project team that examined information related to customer experience metrics of a car dealership, including vehicle purchase date, inclusion of additional warranty, lease vs. purchase, etc. Our task was to develop software to predict the point at which an escalated customer complaint would likely develop into a lawsuit. After receiving 77MB of data to analyze, we developed metrics in SQL and used statistical analysis tools in Minitab and Excel. The model that I created accurately predicted when a lawsuit would not occur with 99.5% accuracy and when a lawsuit may occur within 80% accuracy.

I believe that through these experiences, along with my demonstrated leadership through my Resident Advisor and Peer Advisor roles, I have developed a unique combination of skills that have prepared me well for Amazon's Business Analyst position. I appreciate your time and consideration, and I look forward to discussing my qualifications with you further during an upcoming interview.

Sincerely,

Student Name

INTERNATIONAL STUDENTS

As an international student, you should only obtain information related to your individual visa status from the University of Michigan International Center or an experienced immigration attorney. **Advice from any other source may be inaccurate.**

If you are seeking employment in the United States:

Contact the U-M International Center for guidance and make an appointment with an International Center Advisor.

The U-M International Center and the ECRC regularly host workshops for international students on finding internships and full-time jobs in the United States. For more information, see their website at internationalcenter.umich.edu.

Preparing for the Job Search

- There are many employers who hire international employees. International students have much to offer employers including cross-cultural skills, diversity, a global perspective, perseverance, and language/skills.
- Networking is essential. Many jobs are found this way. In the U.S., self-promotion in communication is considered a strength, and is often necessary when networking.
- Language barriers, real or perceived, and/or other concerns about communication skills may exist. For assistance, go to the University of Michigan's English Language Institute website lsa.umich.edu/eli.
- Use a diverse approach when looking for opportunities. Include companies with international locations, and seek out occupations where international employees may be needed. Try to gain experience through internships.
- Gain a thorough knowledge of your CPT, OPT, AT, and visa status; this will help you as well as potential employers.

Tips for Interviews

- Some international students may not realize when their language skills are causing them to be misunderstood. Look for nonverbal clues, such as follow-up questions that don't match your responses or sudden disinterest on the part of the interviewer.
- Make sure you express proper nonverbal communication; always look directly at the employer in order to portray confidence and honesty.
- Pursue professional experiences that demonstrate an immersion into U.S. culture as well as daily use of the English language. Some experiences include intramural sports, residence hall activities, student organizations, and leadership positions.
- For additional resources visit career.engin.umich.edu/career/international-students

International Center

(734) 764-9310

Main Office: icenter@umich.edu

Located in the Student Activities Building

515 E Jefferson Street, Ann Arbor, MI 48109

HOPING TO GAIN VALUABLE INDUSTRY EXPERIENCE? CONSIDER DOING A CO-OP

The Cooperative (Co-op) Education Program assists students in pursuing an optional program of work while studying in the College of Engineering. Students can find co-op positions independently or by using ECRC resources such as Engineering Careers, by 12Twenty, a web-based recruiting system. A co-op search is the same as any other job search—students apply to organizations and then may be invited to interview. For more information visit career.engin.umich.edu/co-ops

What is the difference between a co-op and a summer internship?

Co-ops involve a longer commitment than a traditional internship, generally May through December or January through August. An internship typically takes place between May and August. We recommend that you try and obtain a summer internship or co-op before you graduate. For more information email ecrc-intern-coop@umich.edu

JOB SEARCH STRATEGIES

Utilize CoE RESOURCES

- Start your search early! Recruiting kicks off in September and continues throughout the academic year; be in the mix at the peak of recruiting
- Attend Career Fairs, Company Days, and other employer hosted events
- Search and apply for internship, co-op, and full-time jobs through your Engineering Careers, by 12twenty account
- See who is recruiting and/or hiring Michigan Engineers. Check out the ECRC Annual Salary Report: career.engin.umich.edu/career/salary-info

DIVERSIFY Your Approach

- Develop a list of desirable employers, then expand this list by researching their competitors
- Job boards can lead to success
 - Apply to employer career portals
 - Search sites such as Indeed, Glassdoor, LinkedIn
 - Specialty job boards typically run by professional associations or geared toward engineering specific job
 - Engineering Careers, by 12Twenty
 - ECRC's Additional Job Search Links: career.engin.umich.edu/job-search-links
- Build and enhance your digital profile (see p. 35)

NETWORK Your Way to a Job

- Build your network by connecting with faculty, family associates, friends, and former colleagues
- Utilize LinkedIn to connect with Michigan Engineering alumni
 - Search LinkedIn groups
 - Gather information through informational interviews
- Engage and interact with employers
 - Via campus events, stay connected through email follow-up or LinkedIn

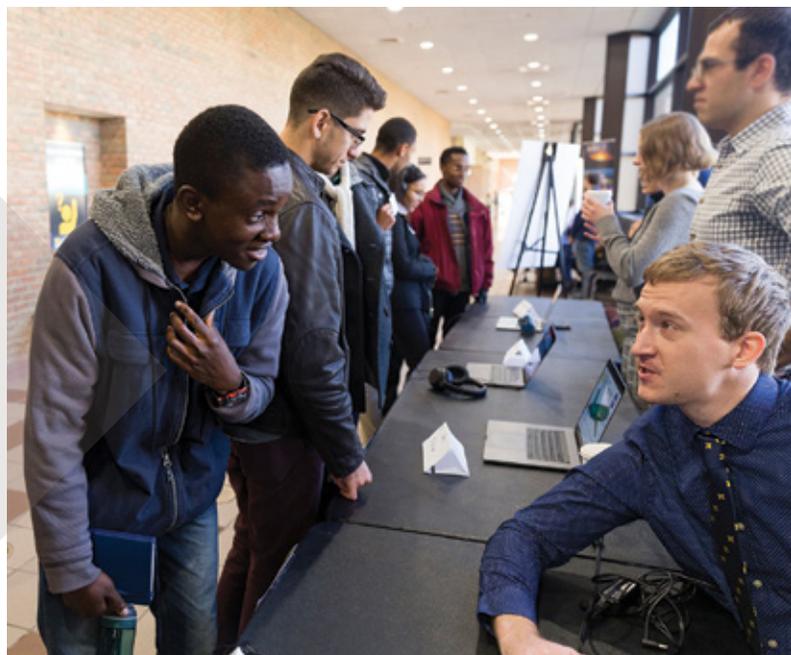
CUSTOMIZE Your Materials

DO NOT send in the same resume and cover letter for each job you apply for

- Optimize your resume; include your skills and experience that match the position requirements
- Tailor your cover letter; articulate your interest in the job and company, provide context for how your background aligns with the qualifications of the job

ORGANIZE Your Way to Success

- Identify your job search goals
 - Set measurable goals — for example: research two new companies and apply for five jobs this week, update my LinkedIn profile, etc.
 - Read ECRC emails and Events Calendars to learn about upcoming employer events and recruiting opportunities
- Set up job alerts — Immediately learn about jobs of interest
- Create a system to keep track of your applications, employer information, job descriptions, etc.
- Pay attention to job posting deadlines — don't miss an opportunity



EXPLORE AND APPLY FOR RESEARCH OPPORTUNITIES

Gain relevant experience and expand your knowledge by engaging in research. Explore the many robust research opportunities available at Michigan.

Undergraduate Research Opportunities Program (UROP) -

UROP provides opportunities for first-year and sophomore students to work on research and creative projects with University of Michigan researchers and community partners in all academic disciplines. (lsa.umich.edu/urop)

Summer Undergraduate Research in Engineering (SURE) -

College of Engineering-specific program that offers summer research internships to students who have completed their sophomore or junior year. Participants conduct research with some of the country's leading faculty in a wide range of engineering disciplines. (sure.engin.umich.edu)

Multidisciplinary Design Program (MDP) - College of Engineering-specific program that offers a variety of faculty-led collaborative multidisciplinary research teams in addition to industry-sponsored projects. (mdp.engin.umich.edu)

Engineering Department Research - College of Engineering departments conduct research specific to their discipline. Check department web pages to explore faculty members' research topics. (engin.umich.edu/departments)

Student Employment Website - Resource for students to explore, and apply to, part-time jobs at the University of Michigan, both on campus and with other local employers. Research Assistant positions may be found using this resource. (studentemployment.umich.edu).

Tips for Applying

- Update your resume and schedule a resume review with an ECRC Advisor via Engineering Careers, by 12twenty
- Research Programs: research timelines and application requirements specific to that program
- Engineering Department Research: connect directly with department faculty and/or graduate student researchers to express interest in their research/lab; send a concise email expressing your interest and attach your resume

Faculty Outreach - Email Sample

Dear FACULTY PROFESSIONAL NAME,

My name is Anne Arbor, and I am a junior majoring in Biomedical Engineering with a minor in Computer Science. I learned about your lab through the spotlight of your most recent publication in the BME newsletter. After taking Quantitative Cell Biology, I am really interested in systems biology, so I was very intrigued to read about your research studying cellular mechanisms related to HIV. I would like to learn more about how you use measurements of cytokines as input to computational models to investigate disease susceptibility.

Over the summer, I participated in a research experience where I was involved in a project using data-driven modeling in order to study gene interactions related to melanoma drug resistance. While involved with this project, I gained skills using Python to organize data and perform principal component analysis, solve differential equations, and perform least-squares optimization. I believe my strong background in computation would allow me to quickly learn any languages or libraries used in your research.

I strongly believe that my dedication and skills would be beneficial to your project, and I would appreciate being considered for any openings on your team. I have attached my resume for your review and I look forward to speaking with you further.

Thank you for your time and consideration.

Anne Arbor

CAREER FAIRS

What Is a Career Fair?

A career fair is an opportunity for employers and students to meet one another and determine whether there may be a suitable job match in the near or long term. Career Fairs are held throughout the academic year by student organizations, engineering departments, and the ECRC. If you are searching for a summer internship, co-op, or full-time position then you will want to take advantage of the first Engineering-wide fall career fair held in September when the college recruiting cycle kicks off. That fair, and the winter fair in January, will draw hundreds of employers and thousands of students, so learning how to navigate the fair experience is essential.



Tips for Virtual Career Fairs

- Prepare as you would for an in person fair by following the tips on page 31
- Carefully read the instructions and/or guide for the Virtual Career Fair you plan to attend so you fully understand how to use the platform and follow any recommended tasks before the fair. This could mean setting up a profile and testing technology
- Plan the location you will be at during the fair to make sure you have secure internet and phone reception as well as a professional background for video calls
- Know that technical difficulties may happen. Whether your connection is not strong or your video does not work, try not to let that interfere with your focus
- Pay attention to when sign up for 1-on-1 appointments begins and ends

Sample Follow Up After a Networking Event

Hello [Contact],

I enjoyed meeting you at the EVENT NAME last week. I appreciate you taking the time to speak with me about potential career opportunities with COMPANY NAME. I was very interested to hear about your work involving the rehabilitation of natural streams and have applied to the available environmental engineering internship position online as you suggested.

I wanted to reaffirm my interest in working for your company. As we discussed, I am confident that my experience in teamwork and creative problem solving gained while working on the Living Building project with BLUELab at the University of Michigan would allow me to contribute significantly to your team.

Thank you again for your time and consideration. I look forward to hearing from COMPANY NAME.

Sincerely,
NAME



ENGINEER YOUR IDEAL CAREER

From the office to the field to the plant, our engineering team plays an integral role in providing an essential service to the people and businesses of Michigan.

It's an exciting time in the energy industry. Join the fun today!

ConsumersEnergy.com/careers



LILLY FOR BETTER

We live in an amazing era for medicine. At Lilly, we use groundbreaking science to meet unmet medical need in the areas of diabetes, oncology, immunology, neurodegeneration and pain. Our determination is to advance the best science of the day in an effort to make life better for people around the world.

lilly.com
2020 CA Approved for External Use
PRINTED IN USA
©2020, Eli Lilly and Company.
ALL RIGHTS RESERVED.



Career Fair Preparation

- Utilize college resources to determine what companies will be attending the fair
- Determine which companies are looking for you: position type, major, degree, work authorization status, etc.
- Create a top-10 list and research each company and possible positions of interest
- Network! Attend other campus events that companies you are interested in may be hosting prior to or after the fair
- Be proactive: apply for open positions prior to the fair and mention this in your conversation
- Have a well-written resume: attend a resume writing workshop, or visit the ECRC for a resume critique and/or an Employer Resume Critique event
- Create a 30-second elevator pitch and practice it!
- Prepare questions for your companies of interest
- Plan your professional attire
- Bring a folder or portfolio with multiple copies of your resume, notepad, pen, and your list of researched companies

Career Fair Day

- Bring a positive attitude, smile, confident handshake, and targeted pitch to each recruiter you meet
- Convey interest, demonstrate knowledge about the company/position, explore fit, be engaging
- Be respectful of recruiters' time before, during, and at the end of the fair
- Be prepared for long lines; review your research on the company while you wait
- Take notes on your interactions, including who you spoke with. Request contact information and follow up with a thank-you email after the fair

The Elevator Pitch

An elevator pitch is a short (30-60 second), concise, and memorable introduction. It highlights your strengths and what distinguishes you from others. It provides employers with quality information about who you are, and what you can offer them. When creating your pitch, think carefully about what you want each individual employer to know about you, and how you can help them. After you formulate your pitch, practice it often. The goal is to sound confident, sincere, and engaging, without sounding rehearsed. Find additional elevator pitch examples on page 32.

Sample Elevator Pitch

Hello, my name is Emma Walters and I am a sophomore at the University of Michigan studying mechanical engineering. I am seeking an internship in the biomedical industry with a focus on joint mechanics.

I have worked on two complex biomedical engineering projects, which I believe will be an asset for this type of internship. Last year I worked on a student team where we studied the Stryker Triathlon Total Knee Replacement and proposed a design recommendation that reduced bone deterioration within patients.

I am also currently working with Michigan Neuroprosthetics to design a neurologically controlled hand prosthetic to be 3D-printed for use on patients with wrist amputations. These experiences have enhanced my leadership, communication, and problem-solving skills, which would be beneficial in a regulatory affairs engineering internship with Zimmer Biomet. Could you tell me more about the internship program?

SAMPLE ELEVATOR PITCHES

For Career Fairs

Hello, my name is NAME and I'm a sophomore studying electrical engineering. I'm seeking a summer internship in a customer-focused industry. In my intro-engineering design course, I worked together with a team of students to design, build, and test an autonomously operated quadcopter. I also currently work as an engineering tour leader where I engage with a variety of prospective students each week. Through my experiences, I have developed a strong collaborative spirit. I know your company culture emphasizes cross-functional teamwork and customer-focused design. Could you tell me more about how you've experienced this aspect of your company's culture in your daily work?

Hello, I'm NAME and I'm a senior studying materials science and engineering graduating this May. I am seeking a full-time position in product development. I recently interned at Ford where I led a project to evaluate the mechanical performance of a new material by planning and executing a variety of feasibility tests. On campus, I serve as a student leader in the Michigan Marching Band, where I help band members execute successful performances each week. I think my passion for technical challenges and leadership have prepared me well for a full-time opportunity at your company. I recently applied for an entry product engineering role on your company's website. Would you be able to tell me more about the role?

Hello, my name is NAME and I'm a first year student here at the University. In the past, I worked as a science tutor at my local high school and was able to assist several students in studying for their biology, chemistry, and physics AP tests. On campus, I am involved in the WISE residential program and am the team captain for my intramural soccer team. The tech industry has been an interest of mine for a long time and to be able to contribute to the building of the company, potentially even as a first year intern, interests me greatly. I would love to join a fast-growing company that values innovation and creativity, and this seems to describe your organization based on what I've read on your website. Can you tell me more about your company and how I might be able to get involved?

For Networking Events

Hello, my name is NAME, and I'm a junior studying environmental engineering. In your presentation, you mentioned how interns take a high level of responsibility and ownership for their summer projects to influence the business in big ways. I was really excited by this as someone who is passionate about sustainable design. Could you tell me a little more about the types of projects that interns typically work on?

Hello, my name is NAME. Thank you for sharing in the presentation how your internship with your company helped prepare you for your current role within the company. I was wondering if you could speak a little more to what about your internship program experience compelled you to join the company full time?

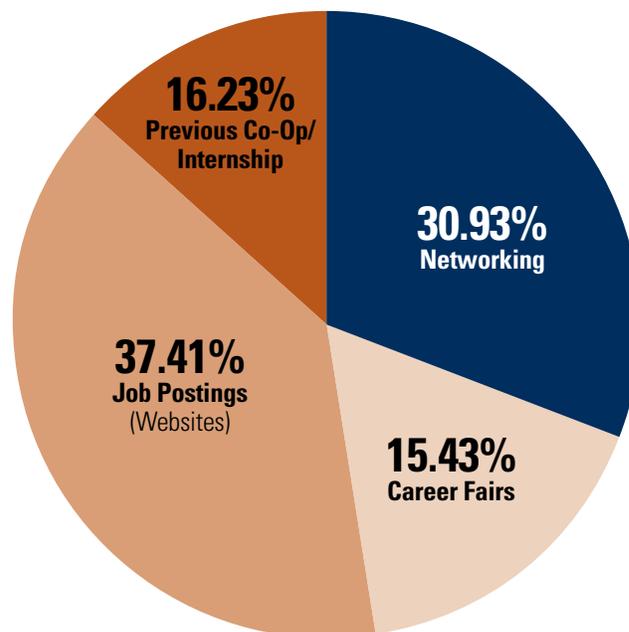
NETWORK YOUR WAY TO A JOB

NETWORKING IS the development and cultivation of interpersonal connections and relationships that provide you with information, advice, and future contacts. Networking is a long-term investment that goes beyond the initial interaction. It is a strategic connection with a person for their insight into a profession, organization, or industry of interest. Networking is an opportunity to gather information and insight; however, it is also reciprocal and interactive.

NETWORKING IS NOT a quick fix. It takes time to build relationships. It does not involve making unsolicited random calls or sending emails hoping for a response, nor asking outright for a position. Networking is not unilateral: you have to give to the conversation to build a relationship.

NETWORKING IS IMPORTANT. As you can see in the graph to the right*, networking is one of the top ways Michigan Engineering students find full-time job opportunities. In addition, 79% of professionals consider networking to be important to career success.

LEADING WAYS STUDENTS FIND FULL-TIME JOB OPPORTUNITIES



*2021-2022 First Destination Survey. 1,251 respondents answered this question.

REMEMBER:

- Start now; don't wait until you need something to begin networking
- Relax, it is just a conversation
- Adapt for the context/setting
- Be yourself!
- Follow through
- Be gracious

Context Matters: Know Your Setting

Prepare an introduction to establish rapport.

NETWORKING & CAREER-FOCUSED EVENTS:

- Minimal small talk will typically suffice
- Discuss each person's skills, experiences, and professional interests

CONFERENCES:

- Discuss your conference experience (e.g. keynote, session, posters)

INFORMATION SESSION OR TECH TALK:

- Likely to discuss the presenter's topic or company

CASUAL COFFEE MEET-UP:

- "Small talk" will occur to build rapport
- Find common subjects of interest for prolonged conversation

THE INFORMATIONAL INTERVIEW— A GREAT WAY TO NETWORK

The informational interview is a great way for job seekers and students exploring career options to obtain information from professionals working in their fields of interest. In an informational interview you are the interviewer, asking the professional several questions about what they do, the industry they are in, the strengths and challenges in their jobs, and industry trends. The interviewee may also have excellent information to share on the job market in their industry, and what geographic areas to target.

What Motivates Professionals to Grant Informational Interviews?

The reasons are varied. Generally, most people enjoy sharing information about themselves and their jobs, and especially love giving advice! Some may simply believe in encouraging newcomers to their profession; others may be scoping out prospects for anticipated vacancies. It is common for professionals to exchange favors and information, so don't hesitate to call upon people.

Sample Questions for an Informational Interview

QUESTIONS TO ASK

- Where did you start your career?
- What does a typical work day look like for you?
- What do you like most about your job?
- What do you like least about your job?
- What advice do you have for job seekers interested in this field?
- What are the trends in this field, and where do you think this industry is headed?
- What are some current challenges you encounter in the work you do?
- Who can I contact to learn more about this field?

QUESTIONS NOT TO ASK

- Do you have a job for me?
- Do you have an internship for me?
- How much do you make?

How Do You Set Up Informational Interviews?

One possible approach is to send an email requesting a brief informational interview (clearly indicating the purpose of the meeting, and avoiding any reference to a job). Follow this up with a phone call to schedule an appointment. Or initiate a contact by making cold calls and setting up an appointment. The best way to obtain an informational interview is by being referred from one professional to another, a process that becomes easier as your network expands.

"Informational interviewing was a surprisingly rewarding process. I was encouraged and motivated by the eagerness of near strangers to speak with me and offer their insights and experiences transitioning from academia to industry positions. I learned important job title vocabulary that made my job searching more efficient and expanded my network exponentially. My resume was ultimately reviewed at my current workplace because a contact I met in a 30 minute informational interview forwarded my resume."

— Emily, PhD Environmental Engineering

Sample Informational Interview Request

Subject: Michigan engineering student seeking your advice

Dear [Contact],

My name is [student], and I am a University of Michigan Mechanical Engineering graduate student who found your information on the U-M alumni LinkedIn group.

May I have 15 minutes to ask you about your experiences at Cummins? I am interested in learning about new product development at a global company, and your insights would be helpful.

I recognize that this may be a busy time for you, so if we are unable to connect by email I'll try to reach you next week to see if that is more convenient.

Thank you,
NAME

LINKEDIN PROFILE CHECKLIST

PHOTO: Professional photographer not required. Take a clear and focused picture in front of a plain background wearing a nice shirt or blouse. Be sure to smile. No selfies!

HEADLINE: Announce “what you are” and “what you hope to be.” Add credibility by highlighting key achievements such as leadership roles or technical skills.

SUMMARY/ABOUT: A strong summary will include your strengths, skills, and interests as they relate to your chosen industry.

EXPERIENCE: List your past and current jobs, even if they were part-time, along with what you accomplished at each. You can also include images and videos of your work.

EDUCATION: Starting with college, list your educational experiences, including study abroad and summer programs. Remove your high school education after one year of college.

RECOMMENDATION: Ask managers, professors, or classmates who have worked with you closely to write a recommendation. This gives extra credibility to your strengths and skills.

ACCOMPLISHMENTS: Courses, projects, honors and awards, and organizations can be added to your profile. Think of these sections as your online resume.

INTERESTS: Research areas of professional interest and follow those topics, companies, hashtags, and people. Following areas of interest helps you stand apart from the crowd by giving viewers a sense of who you are on a personal and professional level.

SKILLS & ENDORSEMENTS: Add your key skills so that your connections can endorse you for the things you do well. Be selective in what you display—only display skills that enhance your brand.

The screenshot shows a LinkedIn profile for Mitch Igan. The profile includes a profile picture, a cover image with a network diagram, and a headline: "Industrial & Operations Engineering Student, Dedicated Leader and Aspiring Design Engineer". The location is "Ann Arbor, Michigan" and there are 212 connections. The profile is divided into several sections: About, Experience, Education, Recommendations, Courses, and Projects. The About section describes Mitch as a junior pursuing a Bachelor of Science in Industrial and Operations Engineering. The Experience section lists two roles: "Rotational Leadership Development Program Engineering Intern, Materials Technology - Coating" and "Peer Advisor, Engineering Career Resource Center". The Education section lists "University of Michigan College of Engineering". The Recommendations section features a recommendation from Andrew LaMarbo. The Courses section lists "Discrete Event Simulation" and "Operations Modeling". The Projects section lists "Entrepreneurial Studies: Start-up Simulations". The Skills section lists "Engineering", "Leadership", and "Entrepreneurship".

To view this profile in more detail visit [linkedin.com/in/mitch-igan](https://www.linkedin.com/in/mitch-igan)



CAN YOU USE MACHINE LEARNING TO TRANSFORM A GLOBAL DISTRIBUTION NETWORK?



© 2023 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and "Cat" "Modern Yellow" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.



WHAT'S NEXT?

JOIN ZF

WORK AT THE FOREFRONT OF AUTOMOTIVE INNOVATION WITH ZF, ONE OF THE WORLD'S LEADING AUTOMOTIVE SUPPLIERS.

[ZF.COM/CAREERS](https://zf.com/careers)

see. think. act.

TYPES OF INTERVIEWS

The Behavioral Interview

WHAT IS IT?

The behavioral interview is a common format used by many employers. This is because the behavioral interview assesses how past behavior predicts future behavior. It is assumed that you will address a situation in the future similarly to how you dealt with it in the past. Remember, you have to give specific examples from your past.

STRATEGIES FOR SUCCESS

- Responses in behavioral interviews must be specific and detailed. In fact, employers often indicate students are not specific enough in describing their answers. Be sure to address all aspects of the STAR formula in your response. (An example of a STAR response can be found on page 42.)
- Make sure you identify a variety of examples from past experiences—the more recent, the better. Be sure you use a diverse selection of examples and do not forget to have positive and negative situations to share.

SAMPLE QUESTIONS

- Give me a specific example of when you used good judgment and logic to solve a problem.
- Describe a situation where you used persuasion to successfully convince someone to see things your way.
- Tell me about a time when you needed to be resourceful to finish a project on time.

The Case Interview

WHAT IS IT?

In a case interview you are asked to analyze a business question or case. However, unlike most other interview formats, the case interview is an interactive process. Case interviews are most often used by consulting companies. In a case interview, the interviewer is assessing your thought process—both analytical and creative—in answering the question(s) posed. Typically, the more specific and quantitative your process is, the better!

TIPS

- Many consulting firms have interview preparation sections on their Careers webpage.
- Connect with alumni who may be employed with the company where you are interviewing. Check the Professional Network within the Alumni Association of the University of Michigan (AAUM) to find a Michigan graduate who is working where you plan to interview.
- Because the case interview is designed to be interactive, be sure to listen carefully and ask for clarification.
- When working through the case, make sure you let the interviewer know how you are conceptualizing the problem, what evidence you are weighing (or missing) when formulating recommendations, and the recommendations themselves.

The Technical Interview

WHAT IS IT?

In the engineering world, the technical interview is quite common because it enables employers to assess your technical skills through a demonstration of how you solve problems, reach conclusions, and incorporate novel thinking into your approach. Some technical interviews are general, meaning you may be asked to solve math problems or brain teasers. Others may be specific based on the type of work you will be doing with the company.

TECHNICALLY SPEAKING

- When answering technical interview questions, make sure to think out loud.
- Pay attention to the information that the interviewer provides to you throughout the process. In many instances, the interviewer will provide clues and direction to help you find the answer.
- Do not be afraid to ask questions in the technical interview. If you are stuck or need more information to determine the answer, ask!
- If they provide tools like a whiteboard, use them. Show them visually how you are conceptualizing your answer.

SAMPLE QUESTIONS

- Why are manhole covers round?
- Name five ways to retrieve a needle from a haystack.
- Please explain the concept of polymorphism in object-oriented development.
- Why do we need to do PCC?
- What is Petrol Calorific Value?

Learn more about preparing for technical interviews at career.engin.umich.edu/technical-interviews

THE INTERVIEW GETS YOU THE JOB

This saying in career services is popular and, more importantly, largely true. If you have reached the interview stage, congratulations! It means your resume is working. Still, much of the hard work is just beginning as you start interview preparation.

Sometimes It Is More Than What You Say

Nonverbal communication has the ability to convey a stronger message than verbal communication.

- Stand tall
- Sit up straight
- Use a firm handshake
- Keep eye contact
- Smile

Arrive Early

Being on time to your interview means arriving 15 minutes early. This gives you time to relax, and also shows the employer you are serious about the position.

Top Five Tips

- 1 Schedule a mock interview at the ECRC and have one of our Career Advisors evaluate your performance through practice and feedback.
- 2 Avoid the use of verbal filler words when you answer questions. Words such as “um,” “ah,” “like,” “you know,” and “I think” should be avoided.
- 3 Spend time reviewing your experiences, formulating responses to typical interview questions, and highlighting your unique educational and professional background.
- 4 You must come prepared with several questions to ask the employer. The absence of questions demonstrates a lack of preparedness and interest.
- 5 After your interview, remember to send a thank-you email within 24 hours. Use the email to reiterate your enthusiasm for the position, discuss skills you neglected to mention, and your strong fit for the position. See examples on page 51.

Tell Me About Yourself

When asked this question, your goal is to share your compelling professional story by summarizing your experiences, qualifications, and interests related to the specific position you are discussing. In other words, present yourself as a strong candidate for the job.

There are three main components to a successful response to this question:

1. Provide basic introductory information: Your name, degree, major, and year.
2. Highlight 1–2 skills, experiences, and/or interests that are relevant to the job /employer.
3. Explicitly connect your skills, experiences, and/or interests to the specific job /employer.

*My name is **Mitch Igan**. I'm currently pursuing a bachelor's in Industrial and Operations Engineering at the University of Michigan. I have a knack for making things more efficient in the world around me and I'm driven by a desire to reduce the amount of time and steps required to complete a process. This natural strength led me to IOE where I'm learning more about process optimization.*

As a supervisor in a campus café, I have been recognized for redesigning two distinct work streams, which led to a reduced wait time for guests and a more efficient closing procedure. These improvements led directly to increased customer satisfaction surveys and lower overtime costs.

In addition, I have held a number of leadership roles on campus where I have facilitated large and small groups, mentored students on effective study strategies and problem-solving skills, and supported first-year students in their transition to college. My process improvement experience combined with my leadership skills have positioned me well for the internship at Kraft Heinz. I'm particularly interested in scaling consumer goods and would love to gain hands-on experience in a manufacturing plant. I'm excited to be here today and to learn more about the opportunity.

QUESTIONS TO ASK EMPLOYERS

It is expected that you will ask questions throughout the interview process, especially at the end of an interview. Asking questions of the employer demonstrates that you are engaged in the interview process, and it can also help you to get a sense of whether or not the organization and role are a good fit for you. Below you will find several categories of questions you may wish to consider asking during the interview process, along with sample questions to help get you started.

Clarifying Questions

These are questions that are focused on addressing questions you have about the organization or the role for which you are applying.

- Can you provide additional details regarding the day-to-day responsibilities of this position?
- What type of work could I expect to do within my first year?
- What is the organizational structure of your company?

Research-Based Questions

While preparing for the interview, it is likely that you will come across interesting information about the company (e.g. mergers/acquisitions, new initiatives, or changes in their market). Asking research-based questions can demonstrate your sincere interest in the position.

- While preparing for this interview, I read (insert researched content). Can you tell me more about how that is impacting your daily work?
- I noticed that (insert company) has a goal of accomplishing (insert goal) by 2025. In your view, how is the organization progressing toward accomplishing that goal?

Conversation-Based Questions

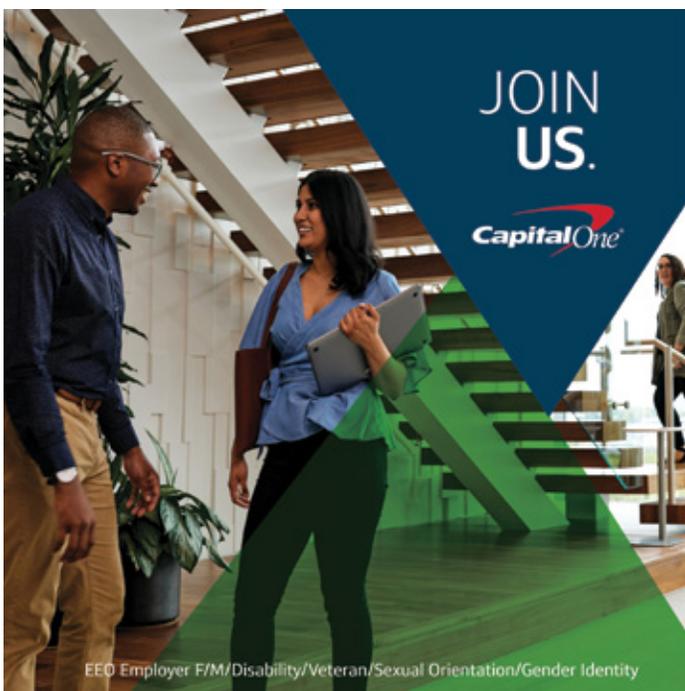
Throughout the process, interviewers may provide information regarding their experiences at the organization. Asking questions based on your conversation can be a good way to gain valuable insight that will help you to assess your fit within the organization.

- Earlier, you mentioned (insert topic the interviewer mentioned). Can you tell me more about that?
- You mentioned the variety of roles you have had at the organization. How did the organization support your professional development?
- You each made several references to the collaborative nature of your work. Can you share more about how you balance individual autonomy with the team aspect?

Procedural Questions

Upon completion of the interview, most interviewers will tell you more about the next steps in the hiring process. If they do not provide this information, it is appropriate for you to ask procedural questions at the end of the interview.

- What are the next steps in your hiring process?
- What is your anticipated timeline for the rest of the selection and hiring process?
- Is there any additional information you need from me moving forward?



A CLOSER LOOK AT BEHAVIORAL INTERVIEW QUESTIONS

What Recruiters Want to Know

The best way to prepare for an interview is to understand what the recruiters are trying to assess in the interview process and come prepared to show evidence that you have what they need. In most cases, recruiters and hiring managers want to know three things:

1. Can you do the job (do you have the skills and experiences they require)?
2. Will you do the job (do you demonstrate the interest and motivation to perform the job)?
3. Do you demonstrate values and an approach to your work that match the company's values and work style?

What's the Best Way to Respond to Behavioral Questions?

Your resume provides a snapshot of your accomplishments, but it doesn't tell the reader how you accomplished these things. Interviewers need to understand the "how" to determine whether your approach is a good match for their environment. As you consider your experiences and the achievements you will describe, make sure you provide evidence of the skills they are looking for. The most commonly required skills or competencies include problem solving, teamwork/ collaboration, communication, etc. See page 8 for NACE Career Readiness Skills.

Example of a Common Question

TELL ME ABOUT A TIME WHEN YOU HAD A CONFLICT WITH A TEAMMATE ON A PROJECT.

First ask yourself, what do they want to know?

They want to know that you have the skills to work through conflict collaboratively, openly, with respect for others and the process, and that ultimately you are able to complete projects successfully. Your response should provide evidence that you have done this successfully in the past.

Provide evidence that you possess the skills they are looking for. In this case, the interviewer wants to know that you can successfully navigate through conflict, while maintaining focus on the team's goal and moving the project forward. In addition, they also want to know that you will place team goals above personal objectives. Employers recognize that getting stuck in conflict can create time delays, cause the project to stall, and detract from team morale. Evidence of behaviors that interfere with progress cause concern. As you respond to the question, recognize that the interviewer is listening for evidence of your ability to work through conflict collaboratively.

A strong answer demonstrates the candidate's ability to utilize desired behaviors to successfully navigate conflict.

- Invites, listens to, and seeks to understand another's point of view
- Conveys one's own perspective in a respectful manner
- Facilitates an open discussion and analysis of possible solutions
- Collaborates effectively to achieve the project goals

A weak answer suggests the candidate may lack awareness or the necessary skills to navigate conflict.

- Maintains a singular focus on his/her individual solution
- Demonstrates a lack of respect for team member(s) and/or their ideas
- Lacks awareness of his/her role and accountability in addressing the conflict
- Expects a manager/leader to solve the problem for them

Provide a brief, complete summary of the experience you have chosen to share. Utilize the STAR FORMULA:

- SITUATION** Clearly define the context (when did this situation occur? Which class, team, internship, etc.?).
- TASK** Explain the specific task you were asked to accomplish or the specific goal of your project.
- ACTION** Describe the steps you took to address the problem or task. Use “I” statements to explain the specific role you played in solving the problem or overcoming the conflict. In other words, answer “What did you do?” Demonstrates logical and/or technically sound approach to solve the problem.
- RESULT** Don’t forget to tell them how the story ends. How did things turn out? Did you achieve the desired outcome? Make sure to reflect on undesirable results and clarify any lessons learned.



THE STAR FORMULA



A compelling STAR response to “Describe a time you had a conflict with a teammate on a project. What did you do? What was the outcome?”

S	T	A	R
<p>Last semester in my Intro to Java class, we had a partner project that would serve as our final exam. The assignment was open-ended. Basically, we had to take what we learned in class and create something cool. The basic requirement was to incorporate networking (two computers talking) and a database (place to store data). We had four weeks to complete the project before a final presentation to our peers and professor.</p>	<p>We decided to design a multiplayer fantasy football game simulator. Players would determine the plays and interact with opponents remotely. The code was very complex and there were a lot of features we wanted to include. Midway through, we realized we were running out of time and had to prioritize our features. My partner wanted to focus on the graphic elements to make the game visually appealing for the peer evaluation. I wanted to incorporate more complex coding to get a higher evaluation from the professor.</p>	<p>After losing some time debating our positions, I suggested that we go through each feature one by one, and assign a point value to estimate its impact on our final grade, and then devote time to the features with the greatest impact, working through as many as we could until time ran out. My partner agreed. We assumed that the more visually appealing features were likely to have higher value. So we focused first on the team logos and player pictures. Then we incorporated more advanced coding to give players more play options. Ultimately, we were both satisfied with our end product.</p>	<p>We presented a 10-minute demonstration to our class. The final game included a player information window with multiple images (photo, logo, etc.) and gave players more play types. The game was evaluated by our professor and approximately 100 students. We received high marks for both the visual appeal and the coding complexity, earning an A on the project.</p>



Common Interview Questions Employers May Ask

Interest in the Company/Position

- Why do you want to work for us?
- What can you offer us that other students can't?
- What do you know about our company?

Challenges

- Tell me about a time you were faced with failure, and how you handled that situation.
- Tell me about a time when you didn't achieve your objective.
- Tell about a time when you made a mistake, and how you handled it.
- What were your main challenges in your last position (internship/co-op/full-time)?

Goal Setting & Achievement

- Give an example of a goal you reached and tell me how you achieved it.
- What is your overall career objective? Where do you see yourself in 5 years?
- Tell me about a time when you surpassed all expectations by going "above and beyond."

Time Management

- Tell me about a time when you were faced with multiple priorities. How did you manage that situation?
- Tell me about how you worked effectively under pressure.

Leadership Roles and Group Work

- Describe a time when you had conflict with another person. What did you do in this situation? What was the outcome?
- Describe a group project that you were a part of. What steps did you take to achieve your group's goals?
- Tell me about a time you took a leadership role.
- Share an example of how you were able to motivate co-workers/team members.
- Describe a decision you made that was unpopular and how you handled implementing it.

Technical Knowledge

- Describe a class project or work assignment that challenged your skills as an engineer. What did you do in this situation?
- What activities have you participated in to improve your technical competence and awareness over the last year?
- Describe a time when you confronted a problem that really tested your engineering knowledge.
- Describe a time when you used your engineering knowledge to solve a problem for which there appeared to be no answer.

Detail Oriented

- What checks and balances do you use to make sure that you don't make mistakes?
- Can you describe something you worked on that involved a lot of detail, and how you handled it?

HOW TO PREPARE FOR VIDEO INTERVIEWS

Prepare to use the technology

Before the interview, take time to thoroughly test the technology you will be using to avoid any unforeseen issues. If the interview will be conducted over videoconferencing software, try out the software in advance if possible. Bring power cords for your devices. Test wi-fi and cell service beforehand. Make sure you have the interviewer's phone number, just in case you lose your connection. Silence your phone and make sure no alarms are set (noises = distractions).

Evaluate the video frame and background

Check that there is proper lighting. Ensure the background is clean and appropriate. For example, no unmade beds, messy counters, or roommates walking around in the background. Try not to have a window behind you as it can create a harsh backlight on the screen. Check that you are not too close to the camera. Both your face and shoulders should be in the frame.

Professional dress

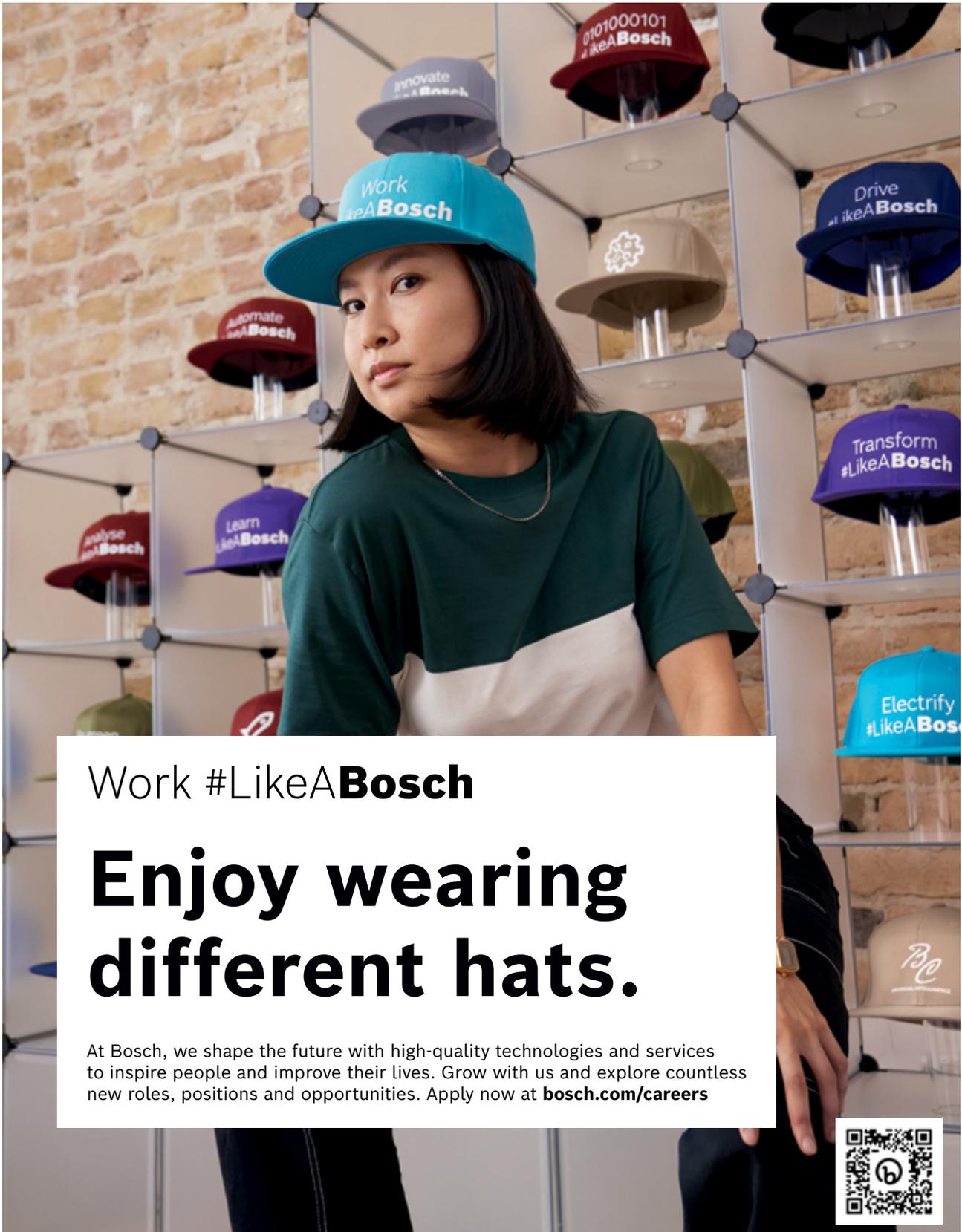
Dress professionally, as though it were a face-to-face interview. While this is especially important for a video interview, it is recommended to dress professionally for a phone interview, too, as dressing professionally can subtly influence how one presents oneself.

During the interview

Have a copy of your resume on hand to reference key examples. In a phone interview, answer your phone professionally: "Hello, this is Betty Beyster." In a video interview, try to look into the camera and not at the screen when talking. This can be challenging, so practice ahead of time.

At the beginning, it is okay to ask if they can hear you clearly or if you should speak up. Speak clearly, concisely, and not too quickly—it is easy to rush speech when nervous. It is fine if you need a moment to think before answering a question. Don't rush to fill silence and remember that the interviewer might be taking notes and may not be speaking during that time. For longer pauses, let the interviewer know that you need a moment to think.





Work #LikeA**Bosch**

Enjoy wearing different hats.

At Bosch, we shape the future with high-quality technologies and services to inspire people and improve their lives. Grow with us and explore countless new roles, positions and opportunities. Apply now at bosch.com/careers



COMPANY CULTURE – FINDING A GOOD FIT

A savvy job seeker understands that the job search is a two-way street. It's important to sell yourself to the employer and make sure it's the right job and place for you. How do you do that? By gathering and assessing information about the job and the company culture, and determining whether it matches your needs.

What is Company Culture?

An organization's culture reflects the values of its leadership and defines what's important; how work gets done, where the boundaries lie, and what's expected. Among other factors, it includes the way information is communicated (transparent, closed) how decisions are made (hierarchical, autonomous) employee recognition and rewards (financial incentives, informal feedback, awards) and even physical environment and amenities.

Why is Company Culture Important?

It's important to understand a company's culture so that you know what you're getting into. If your preferred work style and values are compatible with the organization's offerings, you're more likely to thrive in the environment. Alternatively, if the cultural norms are incompatible with your preferred work style, it may impact your performance and/or your job satisfaction.

Does the Culture Fit Me? Find Out!

1 DETERMINE YOUR IDEAL WORK ENVIRONMENT

You can't match a workplace until you are clear about your own needs. Based on your previous experiences and your values, identify the conditions under which you will work best. Here's a sample list of factors to consider.

- **Work Style** – individual contributor, team based
- **Workspace** – private office, open floor plan, remote
- **Workload** – heavy, moderate, light; consistent or ebbs and flows with seasonal cycles
- **Impact** – contribute to a long-term goal, see immediate results of my effort
- **Communication** – ongoing open dialogue/communication, feedback upon request, during formal review process
- **Inclusion/Community** – embrace diversity in hiring, in thought and in approaches, foster a welcoming environment for all

- **Professional Development** – opportunities for growth, advancement, and skill development i.e. mentorship and employer funded courses
- **Work Schedule** – fixed hours, flexible schedules at employee's discretion, frequent weekend and after-hours required

2 DETERMINE THE COMPANY CULTURE

There are a number of ways to gather information about a company's culture. To get the most accurate picture, explore a number of sources, look for consistent themes and avoid relying too heavily on any one person's opinion.

A. Be Inquisitive in Your Interviews

During your interviews, ask intentional questions that will help you understand whether the environment provides the elements that are most important to you.

SAMPLE QUESTIONS:

Work Style: Can you describe how work is distributed and accomplished within the group? Who would I interface with on a regular basis?

Communication: How do you prefer to communicate with your staff? How does the company's leadership share information about company goals and initiatives?

Inclusion/Community: How does the team/organization celebrate success? How are new employees included and welcomed in the organization?

Professional Development: How does the company support employee development? How does your organization evaluate your employees and provide pathways for advancement?

Work Schedule: Does the company offer flexible work options? During a typical work week, what is the average number of hours that staff put in work?

B. Talk to Other Employees (Current and Past)

Talk to people in various positions and across levels of the organization through multiple touchpoints; career fairs, networking conversations, etc. In addition, find contacts in your own networks (alumni are a great resource) who would be willing to talk with you. Ask them what it's really like to work there, making sure you ask about the positive aspects as well as the challenges, so that you get the full picture.

C. Pay Attention to Your Instincts, Observations, and Company Amenities

Trust your instincts. Look for consistent themes in the feedback you are collecting. Explore conflicting messages further. Look for evidence to support what you're hearing when you visit the site or as you continue to engage with employees.

Seemingly small details about office life can be telling about the culture. An on-site cafeteria with free food at all hours may be a very generous benefit, yet may also be a sign that work is often conducted through breakfast, lunch and dinner. Similarly, widely publicized games, contests and social gatherings may indicate a social, collaborative, competitive environment. Ask about these items to be sure your interpretation is accurate.

3

DECISION TIME - IS IT A FIT?

You know what's important to you and you understand what the company has to offer. Does the opportunity satisfy your top criteria? If so, it sounds like you're aligned with company culture and it's likely to be a good fit. If not, and you're still considering the opportunity, what's your motivation to accept the job? Sometimes there are compelling reasons to accept a job (financial need, get you closer to your next goal, etc.), even if it falls short of your ideal. If this is the case, focus on the positive aspects of the opportunity and adjust your expectations and approach to make it work.

By doing your homework and learning as much as you can about the environment, you'll be more confident in your decision-making and better prepared for your next steps.

Sample Thank-You Note

Dear [Contact],

Thank you for taking time to speak with me yesterday about the production engineer position with Cyberdyne Systems. I enjoyed meeting you and learning more about the role and organization.

After speaking with you, I am confident that my skills and past experiences would make me a good match for the opportunity. As we discussed, I believe my ability to quickly learn how to operate unfamiliar software as well as my past design experience would be great assets in estimating costs and monitoring production.

I am enthusiastic about the exciting opportunity to join your company. Please do not hesitate to contact me at 555-123-4567 or umstudent@umich.edu if you have any questions or concerns, or need any further information. Again, thank you so much for your consideration. I look forward to hearing from you.

Sincerely,
NAME

GUIDE TO APPROPRIATE PRE-EMPLOYMENT INQUIRIES

INQUIRY AREA	ILLEGAL QUESTIONS	LEGAL QUESTIONS
Age	<ul style="list-style-type: none"> • May not require an applicant's age, date of birth, or records to prove his/her age. • Year of graduation from high school. 	An employer may ask whether an individual meets the minimum age requirements set by law. "Are you over the age of 18?" is an appropriate question.
National Origin/ Citizenship	<ul style="list-style-type: none"> • Are you a U.S. citizen? • Where were you/your parents born? • What is your "native tongue"? 	Are you authorized to work in the United States?
Race/Color	All questions regarding a person's race/color will be deemed illegal under state and federal laws.	None!
Religion	Any question with regard to an applicant's religious beliefs, denomination, or any questions that indicate religious customs or holidays observed.	After an individual is hired, an employer may inquire about religious accommodations.
Marital/Family Status	<ul style="list-style-type: none"> • Are you married? • With whom do you live? • Do you plan to have a family? • What are your child-care arrangements? 	<ul style="list-style-type: none"> • Would you be willing to relocate if necessary? • Would you be able and willing to work overtime as necessary?
Personal	<ul style="list-style-type: none"> • How tall are you? • How much do you weigh? 	Are you able to lift a 50-pound weight and carry it 100 yards, as that is part of the job?
Disabilities	<ul style="list-style-type: none"> • Do you have any disabilities? • Please complete the following medical history. • How's your family's health? 	<ul style="list-style-type: none"> • Are you able to perform the essential job functions? • Can you demonstrate how you would perform the following job-related functions?
Arrest Record	Have you ever been arrested?	Have you ever been convicted of _____?
Military	If you've been in the military, were you honorably discharged?	<ul style="list-style-type: none"> • In what branch of the Armed Forces did you serve? • What type of training or education did you receive in the military?

Reprinted from the February 2014 issue of the NACE Journal, with permission of the National Association of Colleges and Employers

YOU HAVE AN OFFER; NOW WHAT?

Congratulations on your offer! Taking the next steps in your professional endeavors is exciting but also challenging. In order to make the best decision for you, make sure you have considered the answers to these questions:

- Where is the job located, and what is it like to live in that area?
- What kind of work will I be doing?
- How will this position fit in with my overall career goals?
- How much time do I have to make a decision? Can I ask for an extension?
- Do my values and lifestyle match the company's culture?
- What are the growth and trends of the industry and organization?

For internships:

- Is housing provided? Is it subsidized?
- What options are available for transportation to the work site?
- How will I be paired with a team?

One Thing to Remember: It's Not Just About the Salary

When it comes to making a decision about accepting a job offer, base salary is just one factor to consider. Think about what is important to you and your career goals; understand the whole package. When an offer is presented to you, consider the items below when making a decision. Please note that the benefits listed below are examples and that not every offer will include all the items listed. There may also be benefits offered that are not listed.

Benefits	Professional Development	Company Culture/Values
<ul style="list-style-type: none"> • Medical • Dental • Vision • Paid Time Off (PTO) • 401K/403B Retirement Savings • Stock Options/Equity • Domestic Partner Coverage • Jury Duty • Bereavement • FMLA and Maternity/Paternity Leave • Relocation Assistance • Signing Bonus/Annual Bonus 	<ul style="list-style-type: none"> • Tuition Reimbursement • Opportunity for Career Growth • Collaboration Opportunities • Involvement in Professional Organizations • Leadership Tracks • Rotational Programs 	<ul style="list-style-type: none"> • Professional Travel • Dress Code • Ability to Work from Home • Location(s) • Management Style • Office Space • Performance Reviews

If the offer does not meet one or more of the things you want, consider negotiating. Not every company will be willing to negotiate, but you can certainly try! Companies do not typically revoke offers when candidates negotiate. When negotiating, be positive, polite, and reasonable. If you decide to negotiate, plan a strategy after speaking with a Career Services Manager in the ECRC. To make an appointment log into your Engineering Careers, by 12twenty account and select Appointments from the navigation menu.

Tips for Offer Negotiation

- Do your homework before entering into a negotiation. Conduct research using ECRC salary data (career.engin.umich.edu/career/salary-info), websites such as Salary.com, Glassdoor, and/or cost of living calculators (salary.com/research/cost-of-living), etc. These tools will help you in determining how much to ask for and why.
- Plan your strategy around your research, your leveraging tools, and who you are communicating with. We recommend negotiating with the company representative you have had the most contact with and are the most comfortable speaking to.
- Make sure to practice before negotiating. Practicing will decrease nervousness and increase your ability to articulate your desires.
- ALWAYS maintain a positive and productive tone in the negotiation. You do not want to jeopardize your reputation or your relationship with the employer.
- See the Extending an Offer Deadline example below.

Accepting an Offer

Accepting an offer of employment, whether verbally or in writing, represents your good-faith commitment to join the employing organization. Once you have accepted an offer, discontinue all further interviewing and search activities, including withdrawing from previously scheduled interviews.

Reneging on an Offer

Reneging on offers can damage your reputation in the industry, as well as the reputation of Michigan Engineering. We expect all students to conduct themselves professionally and ethically in their job search. Please see Offers and Acceptance Policy for more detail on the consequences of retracting committed offers. This can be found at career.engin.umich.edu/career/job-search-policies.

Sample Email to Decline a Job Offer

Hello [Contact],

Thank you for the POSITION NAME offer at COMPANY NAME. It has been wonderful getting to know the team at COMPANY NAME through the interview process. I sincerely appreciate the time you spent with me and your consideration of my candidacy. Ultimately, I have decided to accept another position that is a better fit for me at this time in my career. I remain impressed with the company and team at COMPANY NAME and hope we have the opportunity to connect in the future.

Sincerely,
NAME

NEGOTIATING AN OFFER DEADLINE

Sample Talking Points

EXPRESS APPRECIATION:

I want to thank you for the opportunity to interview at (employer) and for the offer of the (name of position/ department).

OFFER A POSITIVE EXPERIENCE ABOUT THE PROCESS/POSITION:

From the beginning I have been impressed with the team and the people that I would be working with. This offer is very appealing and I am excited to consider it.

ACKNOWLEDGE DEADLINE:

I understand the deadline for this offer is (date). (Refer briefly to why you might need the extra time, e.g.: exams, consult with family, other commitments, etc.)

RESPECTFULLY REQUEST A DEADLINE EXTENSION:

Given the importance of this decision for me, I am hoping you would allow me additional time to consider your offer. If you are in agreement, I would be happy to provide you with my decision by (date).

EXAMPLE WORDING - REFERRING TO THE ECRC EMPLOYER OFFER GUIDELINES

I would be grateful if you could consider extending my deadline to November 30 in accordance with the University of Michigan's Engineering Career Resource Center's offer guidelines regarding internship and full-time employment.

The ECRC recommends a phone conversation when negotiating any aspect of an offer including a deadline extension. To learn more about our recommended guidelines, please visit: career.engin.umich.edu/OfferDeadlines



Building on Belief

COMPANY PROFILE

At TCS, our purpose as a company is to bring **innovation** and **empowerment** to our customers by partnering **cutting-edge IT solutions** with **holistic consulting services** to deliver **end-to-end transformational outcomes**.

OVERVIEW

WHO WE ARE

A global leader in technology-focused consulting, IT services and business solutions.

WHAT WE OFFER

A unique combination of tech expertise and business intelligence to catalyze change & deliver results.

OUR PURPOSE

To empower our customers through holistic and innovative consulting partnered with cutting-edge IT solutions.

OUR HISTORY

- 1968** TCS was founded in India
- 1979** First US sales office is created in NYC
- 2003** Crossed the \$1 billion mark in annual revenue
- 2009** TCS ranked one of Top 10 Global IT Service Providers
- 2021** TCS crosses \$22 billion in revenue & 500K+ employees



HIRING HUB LOCATIONS

- Edison, New Jersey
- Dallas, Texas
- Naperville, Illinois
- Cincinnati, Ohio
- Atlanta, Georgia
- Santa Clara, California

COME WORK WITH US!

We hire entry level candidates for the following positions:

Software Engineer

Engineer

Data Analyst

FOLLOW US

- @tcs_na
 - @tataconsultancy
 - @tcsglobal
 - @tcsglobal
- services - north america

CONTACT US

- www.tcs.com/careers
- *Click on **Entry Level Hiring**
- US.CampusPrograms@tcs.com

AMPLIFY YOUR IMPACT WITH TCS

My team fuels me to do what I do every single day. I love the attention my team gives me and how they truly care.

Anshi
Northeastern University
Joined TCS in 2020

My work at TCS is fueled by my passion and motivation for growth. Each day I wake up to a new challenge that I can learn and grow from while also strengthening my technological skill set.

Peter
Syracuse University
Joined TCS in 2020

APPLYING TO GRADUATE SCHOOL

Graduate School can be an excellent way to deepen your knowledge in a specific subject, expand your knowledge into a new field, or build upon your professional skills. There are several common paths for pursuing graduate education such as professional master's programs, thesis based master's programs, and doctoral programs. Each program will help you to pursue different goals, so it's important for you to reflect on how graduate school fits into your long term career goals. For additional information on applying to graduate school see career.engin.umich.edu/GraduateSchoolGuide.

STANDARDIZED TESTS

One of the common tests for graduate school is the GRE, which typically should be completed at least 2 months before the application is due to ensure the school receives it in a timely manner.

APPLICATION ESSAYS

Common graduate essays are the **personal statement** and **statement of purpose**. The length of these essays range from **1-2 pages** and you should pay close attention to each program's individual prompt.

STATEMENT OF PURPOSE

The statement of purpose differs from the personal statement, as its major function is in describing how you are prepared, what you hope to accomplish, and how graduate school will help you to meet your short- and long-term career goals.

COMMON MISTAKES

Disorganization. Read through your essays and ensure that there are clear transitions and that the ideas build upon one another to get your point across.

Using cliches. Avoid the generalizations like "This is my dream school..." or "When I was a kid I loved playing with Legos..." Instead, try to explain your reasoning with specific examples.

APPLICATION TIMELINES

Fall: PhD, MBA, MS, MA, MENG applications are due.

Spring: Some MBA and MENG applications are available at this time as well.

RECOMMENDATION LETTERS

Make sure to give your recommendation writers **at least one month** to write your letter. Typically graduate programs will ask for 1-3 recommendation letters. Choose your recommendations carefully and think about who will be able to enthusiastically speak to your abilities.

PERSONAL STATEMENT

A personal statement enables you to elaborate on your background, to explore your personal motivations for attending graduate school, and often to highlight your unique life experiences or challenges you have overcome.

WRITING TIPS

Be personal. Essays, especially personal statements, provide an opportunity to let admissions committees know who you are beyond GPA and test scores.

Be engaging. Committees read many essays. You want yours to stand out, maintain their attention, and say something meaningful about you.





Engineering Career Resource Center
230 Chrysler Center
2121 Bonisteel Boulevard
Ann Arbor, Michigan 48109-2092

(734) 647-7160
ecrc-info@umich.edu
career.engin.umich.edu

© 2023 Regents of the University of Michigan, Ann Arbor,
Michigan, 48109

The University of Michigan is an equal opportunity/affirmative
action employer.

Produced by Michigan Creative, a unit of the Office of the Vice
President for Communications. MC230141