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CAREER DEVELOPMENT GUIDE

Rose-Hulman Institute of Technology

Terre Haute, Indiana

Career Services & Employer Relations

Upper Level 266 Mussallem Union 812-877-8475

Open 8am – 5pm Monday-Friday



Scott Tieken
Director

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For Important Dates and Events, Visit

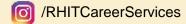
<u>Career Services & Employer</u> <u>Relations</u>



Also Find Us On







About Us

Career Services & Employer Relations is committed to helping you with every step of your internship, co-op, research, and post-graduate process. Our office has Career Advisors specializing in each major, allowing you to build and maintain a relationship with that person during your time at Rose-Hulman, and beyond. We also have a team of trained Peer Advisors, upperclassmen who have had excellent work experiences, available to assist you.

Appointments are not required but are highly encouraged. You can also contact your Career Advisor to set up a virtual meeting if that is more comfortable.



Here are a few of the skills we can help you develop, and resources and services available to you:

- Resume and cover letter writing and reviews
- Career advising
- Interview advice and practice
- Peer mentoring
- Online job posting and interview system
- · Career fairs and graduate school fairs
- Workshops on specific career related topics
- Developing a portfolio
- Offer negotiation assistance
- Curriculum Vitae (CV) and personal statements
- Graduate school research
- Networking assistance
- Company and contact assistance

If you are a student with accessibility needs and feel you would benefit from specialized assistance, please visit our office for additional resources.

Post-graduation success relies heavily on opportunities that become available throughout your academic career. Your nationally ranked Rose-Hulman Career Services Team is here to help you every step of the way!

Your Career Plan

The following is a good framework for your career plan while you're a student.

While this guide neatly organizes a four-year plan of career related activities, it is not meant to be a "blueprint" for the undergraduate years. It is normal for students to change majors or career plans during college, and this would certainly impact the way career plans are implemented.

Report Offer:



Full Time / Grad Prgm



Report Experience:



Internship or REU

FRESHMAN YEAR

- ☐ Visit Career Services & Employer Relations to meet with a Peer Advisor. Say hello to your Career Advisor!
- Establish your profile on Handshake
- Create a resume, <u>have it reviewed by a Peer or Early</u>
 <u>Career Advisor</u>, and upload it to Handshake
- ☐ Create an online portfolio and add the link to your resume and Handshake
- Join student clubs and professional organizations to build skills and enhance your resume!
- ☐ Attend Career Services & Employer Relations events, including all three career fairs
- □ Seek advice from faculty, administrators, counselors, and friends as you build your career.
- Get to know faculty and administrators for future references and professional networking.
- Use Handshake, career fair contacts, and other professional and personal contacts and resources to help you find a summer internship or job
- Report your experience offers and offer status

SOPHOMORE YEAR

- Update your resume with recent accomplishments. Add your Rose-Hulman GPA and consider removing your high school information. <u>Have your updated</u> resume reviewed by a Peer Advisor or your Career Advisor
- Update your information on your Handshake profile Add your updated resume and make sure it is visible.
- Update your online portfolio
- Continue getting involved in student and professional organizations. Consider running for a leadership position
- Attend employer-sponsored events to network with company representatives
- Attend all three career fairs
- Create a LinkedIn profile and begin building your brand and social media presence. Connect with your Career Advisor
- □ Start searching for an internship, co-op or REU related to your major and report your offers / status

JUNIOR YEAR

- Schedule a meeting with your Career Advisor
- ☐ Update your information on your Handshake and LinkedIn profiles. Upload your updated resume and make it "visible"
- Update your online portfolio
- Attend all three career fairs
- Attend the Graduate School Fair if you are considering continuing your education
- Stay involved in school organizations to help sharpen your personal skills - if you are not involved, it is not too late to start
- Expand your network
- Obtain an internship in your preferred field and report your offers and offer status

SENIOR YEAR

- Re-draft your resume to highlight your engineering experience, and transferable skills, and have it critiqued by your Career Advisor
- ☐ Update your online portfolio and your profiles and resume on Handshake and LinkedIn
- Develop a job search plan with your Career Advisor
- Attend all three career fairs (until you have secured a iob)
- If you are applying to graduate school, take the GRE or other required tests
- ☐ Review job offers with your Career Advisor
- Report all offers open, accepted or rejected through the portal or to your Advisor in Career Services & Employer Relations

Your First Steps



https://rose-hulman.joinhandshake.com/edu



Handshake is Rose-Hulman's official job search engine. It is your top resource for finding and applying to internships and jobs. When you first log in you will create a profile.

You can also use Handshake:

- To store your job-related documents, such as resumes, cover letters, and transcripts
- Research companies by industry and/or location
- Sign up for interviews with companies coming to campus
- View upcoming events such as career fairs and professional development workshops

Click on the logo or use the QR code to set up your account.

Username: your Rose-Hulman email Password: same as Banner





Not sure if you picked the right major? Uncertain what you want to do when you "grow up"? Then you are in the right place. MyPlan.com is another free service provided by Career Services that can help bring you career clarity.

MyPlan.com can help you explore options and bring clarity and insight into figuring out what job opportunity is right for you. It offers the most detailed and accurate career assessment tests you will find anywhere.



Go to MyPlan or use the QR code to set up your account.

Check with your Career Advisor for the current license code.





Careershift.com is an online web service provided by Rose-Hulman Career Services, which allows you to search, store, and organize the elements of your job search all in one place.

Use "Rose-Hulman" as your school identifier when setting up your account

- Search, select, and store job listings from all job boards and all corporate postings, conveniently
 available on one platform. Search using the company name, location, industry, job titles,
 experience level, and even if they sponsor H-1B visas
- Get up-to-date contact information, including e-mail addresses, for millions of companies posting jobs you can even search by specific location or industry
- Access in-depth information about contacts using a person's name, job title, company name, or location: most include email and phone information!
- Record, save, and store your correspondence history records automatically
- Easily create personal marketing campaigns which include unlimited resumes, transcripts, and cover letters, and save them to access, print, or e-mail
- Manage your confidential CareerShift account securely from any computer, 24/7, to update and maintain your organized and recorded job search
- Find step-by-step tutorials, news on updates, and a contact center for additional questions or support



Al in Career Development

Critical Considerations

The rapid advancement of generative AI technology is revolutionizing productivity and creativity. As more individuals harness generative AI for career advancement and exploration, it's crucial to adopt responsible and ethical usage of these tools. Our office strongly advocates for conscientious experimentation and usage of generative AI.

Utilizing generative AI tools responsibly can enhance your professional growth. Consulting with your Rose-Hulman Career Advisor is indispensable for safeguarding against potential pitfalls associated with adopting and mastering this evolving technology as a tool in career development. Here are critical considerations to bear in mind:

- Advisor review Get feedback from a Rose Career Advisor. Use all available tools and resources, including advisor consultations. In addition to professional best practice guidance, your advisor can make recommendations on which Al resources are best suited for particular tasks.
- Enhance, don't replace Use AI to brainstorm and improve your drafts, not to replace your own work. AI models often give the most likely answer rather than the best one unless you ask specifically.
- Iterative and conversational Al works best with follow-up prompts. Don't just accept the first response - ask more questions to get better results.
 Tailor your prompts to fit the role, audience, tone, length, format, and details you need.
- Accuracy varies Al tools rely on data that might be outdated or incorrect, and they can produce inaccurate or irrelevant info.
 Always double-check the Al-generated content for accuracy.
- Al bias Al outputs reflect the data they're trained on, which may not always be reliable or unbiased. Be aware of potential biases in the results.
- Privacy caution Avoid sharing personal, proprietary, or sensitive information with AI tools since this data could be used for future training.
- **Follow guidelines** Make sure to follow any guidelines from your employers, school, or department regarding the use of AI. These guidelines may be specific to AI or can fall under general ethical conduct policies.



Al For Your Toolbox

Here are some suggestions for using AI in your job search process:

- **Resume Customization** Do you want to tweak your STEM resume for a specific job? Want to make your bullet points more impactful or concise? Need help with an objective statement? Chatbots can be super helpful for refining and editing your resume.
 - Example prompts "Rewrite this bullet to highlight my professional experience," or "Revamp this bullet for [job role]."
- Interview Prep Interview coming up and you need practice questions? Or looking for ideas on what to ask your interviewer? Chatbots can provide sample questions—feel free to be as general or specific as you want. You can even ask a chatbot to function as an interviewer for a mock interview and then give feedback on your answers.
 - Example prompt "Ask me some behavioral interview questions for a software developer intern position."
- Company Research Researching a company is crucial for your job search and interviews, and AI chatbots make it easier than ever.
 - Example prompt "What should I know about [company name]? I'm applying for a job there." OR "What do employees say about their experience working at [company name]?"
- Industry Insights Curious about a new industry? Use chatbots to help with your research. For dependable company and industry info, use chatbots that provide source links so you can verify the details.
 - Example prompt "Give me a summary of the _____ industry."
- **Skill Development** Want to improve your skills? Chatbots can help you identify the skills you need and how to develop them.
 - Example prompt "What skills should I develop if I want to be a [job role]?"
 For more detailed answers, ask, "How do I develop [skill]?"
- **Auto Apply Tools** Streamline your job search process by using auto apply features on job boards and career websites to quickly submit applications to multiple positions that match your criteria. This can save time and increase your chances of landing interviews. See your Career Advisor for recommended tools.

Resume Fundamentals

GETTING STARTED

Your resume should highlight your education, work, projects, and skills.

RESUME FORMAT

Your resume competes with hundreds of others and gets less than 10 seconds of attention from employers. It must be efficient, effective, easy to read, and flawless.

Do NOT use a commercial resume template.

Avoid commercial templates—they're hard to edit and applicant tracking systems can't read them. Use an ATS-safe STEM resume template.

Here is an ATS safe STEM resume template.

FORMATTING GUIDELINES

- Length: One page
- Font: One family, use bold, italic, underline, and ALL CAPS for emphasis
- Acronyms: Avoid, spell out everything
- Specificity: Provide examples and accomplishments
- **Tenses**: Present for current activities, past for completed ones
- **Pronouns**: No first-person pronouns
- Bullet Points: Start with action verbs
- Paragraphs: Do not use them; use single space within sections
- Margins: 1 inch standard, ½ inch acceptable
- Errors: No typos or grammar issues
- Quantify: Use numbers and percentages
- Save: As a PDF, named "Firstname_Lastname_Resume.pdf"

RESUME CONTENT

There are thousands of resume templates available online, but they do not usually reflect "engineering resumes". Content matters more than design. Keep it clear, simple, and easy to follow.

- **Heading:** Full name, phone number, email, city, state, and online portfolio link
- Objective: Use only when networking or at career fairs; be specific about the job type
- Education: Degree, expected graduation date, GPA, college/university, location, relevant courses (list high school only if you're a freshman)
- Skills: Include technical, personal, and computer skills
- Experience: List in reverse chronological order; include work, projects, and leadership roles; use bullet points starting with action verbs, and avoid personal pronouns
- Leadership, Honors & Activities: Briefly describe and include dates for context
- References: Prepare a separate page with 3-4 references, including contact details; do not include on the resume itself



Build Results-Oriented Bullet Points

Use the following formula to build your bullet points

Skills (Active Verb) + What You Did (Position Responsibilities) + Results/Outcome (How/Why)

Skills: Proficiencies developed through training or experience. Something you learned and developed.

- Professional Skills Knowledge-based skills (e.g., Data Analysis, Industry-specific Computer Software, Engineering Design)
- Personal Skills Personality Traits (e.g., Problem Solving, Communication, Flexibility)

PROBLEM SOLVING

Weak Bullet—Developed solutions to problems posed by client contact

Strong Bullet—Developed solutions to problems with neurosurgical devices posed by client contact culminating in the realization of prototypes suitable for use in laboratory testing

COLLABORATION

Weak Bullet-Worked as a member of an interdisciplinary team

Strong Bullet—Collaborated as a member of an interdisciplinary team to optimize protein concentration from 0.5 mg/mL to 4.0 mg/mL

DATA ANALYSIS

Weak Bullet-Analyzed data from sensor readings

Strong Bullet—Analyzed data in order to develop a comprehensive quantifying equation for chemical levels based on sensor readings

Active Verbs for Your Resume

Active verbs make your resume stand out. Begin each of your bullet points with an active verb. Keep the tenses consistent using past tense verbs for past experiences and present tense verbs for the current ones. Examples of active verbs



The ATS Resume: What is it?

Companies use Applicant Tracking Systems to evaluate submitted resumes before they ever reach a human. The ATS software will read your resume, and then rank and score it. Only applicants with high scores will be called for an interview. Here are tips to make sure your resume gets seen:

*Do NOT use a resume template, text boxes, headers, or footers - ATS systems don't read them.

Formatting is Key

- ATS systems will NOT read graphic resumes, text boxes, headers or footers, pictures or picture PDFs. The resume templates in this guide are ATS friendly, but the vast majority of those available are not. Don't use them.
- -One way to test your resume for ATS compatibility is to copy and paste your resume as plain text into a word document. If your text gets scrambled there, it will get scrambled by the ATS system; columns are problematic

Customize your resume to each position you apply for

- ATS scans for keywords, so incorporate the same keywords and phrases given in the job description and company website
- Use these keywords in your skills section and use achievement-oriented bullet points within your experiences
- Use technical terms when possible
- Minimize Apps Used: Create and edit in the same application (Word is best), then save as a PDF
- Best Fonts: Aptos, Arial, Calibri, Georgia, Tahoma, Times New Roman, Verdana.
- Best Size: 11 point or larger
- Skills: Use a level of proficiency (3 years Solidworks, Conversational Spanish, Intermediate ANSYS and MATLAB
- Revise often: ATS reads when the resume was last edited, and the more recent the edit, the higher your score
- Resave often: PDF files degrade. Save a new copy from your original document roughly every 40 uses
- Edit Carefully: Misspelled words are not recognized and will negatively affect your score
- **Spell it out:** No acronyms or abbreviations (Bachelor of Science, not B.S.)
- Use Al Responsibly: ATS will flag an Al generated resume

If your resume survives the ATS screening it will be reviewed by a human: it must be error free!

SAMPLE RESUME #1: When you haven't had an internship

It's a catch-22. You need a resume to get a job, but you need a job to create a resume! It is true that work experience makes it easier to build a resume, but if you take a minute to think about other things you have done, you might be surprised how quickly a resume can fill up.

Here is a sample resume used for people who have not had an internship

Jonathan Engineer

Ithaca, NY engineerjo@rose-hulman.edu (313)555-1234

Objective: A chemical engineering internship using my practical skills, contributing to the success of a company

Education: **Bachelor of Science, Chemical Engineering** May 2027

Rose-Hulman Institute of Technology, Terre Haute, IN Status: First-year student with sophomore standing

Relevant Courses: Analytical Chemistry 1, Fluid Mechanics, Basic Chemical Process Calculations, Chemical Engineering Design 1, Chemical Engineering Thermodynamics

Ithaca High School May 2023 Ithaca, NY GPA: 3.17

CATALYST Academy Aug 2024 - May 2025

Cornell University, Ithaca, NY

Residential program focused on project research, lab sessions and classes related to STEM

Skills

Experience: Lab: Titration, ion separation, gel electrophoresis and centrifuging

Software: VBA and HTML, ASPEN

Language: Conversation German (4 years high school)

Experience: Granger Lawn Care Service, Granger, UT

2022, 2023

Owner/Operator

Hired and supervised three employees to mow and care for 15 lawns

Netted \$1500 in three months with 100% return customers the following year

FIRST Robotics, Granger High School

Aug 2022 – May 2023

Team Captain

- Collaborated with professional engineers, building a robot for competition
- Supervised and motivated team of six students during nightly design and build sessions
- Placed second in regional competition and awarded \$2500 college scholarship

Boy Scouts of America Eagle Scout Award

Aug 2011 – Aug 2023 May 2023

350 hours of community service on projects including

- . Clearing and mulching mile-long trail in Big Foot Wilderness Park
- . Building and installing planter boxes at Granger Community Theatre

Leadership: Chem-E-Car Competition Team

Aug 2024- May 2025

Assistant Manager

- Successfully completed the AIChE Competition Safety Program
- Led the onsite vehicle audit on competition day

Rose-Hulman NCAA D3 Men's Varsity Soccer Team

Aug 2024- May 2025

Fitness Captain

Elected as Team Fitness Captain to motivate and lead teammates through workouts

Activities: MakerLab Club

C Serve Team Rose Robotics

SAMPLE RESUME #2: After your first internship

Every resume is going to change as your experience changes. You will need to decide what to include and what to delete. Here is an example of making those changes, and a look at adding personal projects.

Here is a sample resume showing class and personal projects

Jeanine T. Poulin

Niles, MI

rosestudent@rose-hulman.edu

777-777-7777

Objective: Secure an internship in the field of Computer Science

Education: **Bachelor of Science, Computer Science**

> Rose-Hulman Institute of Technology, Terre Haute, IN **GPA: 3.75**

Relevant Courses: Data Structures and Algorithms, Web Development, Android Development,

Databases, Software Engineering Requirements, Artificial Intelligence

Skills

Experience: Software: Python, Java, HTML, CSS, JavaScript, AngularJS

Systems: Windows, Macintosh

Internship

Experience: Crane Technologies LLC, Crane, IN June- Aug 2022

Software Engineering Intern

Developed full stack features for 3 separate platforms all supported by 1 backend API

Completed a major redesign overhaul of the Family Manager mobile app built using an Ionic Framework

Led project redesigning mobile app and applying native Android and iOS interface standards

Project Experience:

Personal Project: Track Rest Android Application

2021 - 2024

May 2024

Developer

- Developing an app that provides users a way to track the restaurants they have visited
- Applying Google Maps API to display an interactive Google Map and Google Places API to search restaurants
- Storing data and user authentication using Firebase

GateGo Android Application

Jan - May 2022

Software Lead

- Developed an app that maps 2 airport gates so users can easily find a connecting flight
- Applied Google Maps API to display an interactive Google Map
- Stored data and user authentication using Firebase

Food Swing Application Design

Aug – Dec 2021

Team Lead

- Brainstormed unique application concepts, designed a wireframe and paper prototype for the application, conducted a successful usability test on my developed prototype
- Finalized design on proto.io, making it interactive

Personal Project: 24-Numbers Game

June - Dec 2019

Developer

- Designed a grid-like game where the user must obtain the number 24 from random numbers, 1 through 9, using any simple math operation (team of 4)
- Programmed and implemented using JavaScript and jQuer
- Link: http://link to your portfolio.com

Activities: CSSE Program Mentor

RoseBUD Intern

Blue Key National Honor Society Member

Rose-Hulman Swing Dance Club Public Relations, Instructor

Rose-Hulman Dive Team

SAMPLE RESUME #3: When you have many projects

From day-one you will have project-based classes, teaching tons of hands-on techniques. Some recruiters believe this project experience can be even MORE relevant than experience you get at actual jobs! When you have many projects, they deserve to be highlighted.

Here is a sample resume used for people wanting to show off their projects

gordinge@rose-hulman.edu http://github.com/genevagordin (444) 111-0100 Santa Barbara, CA

GENEVA GORDIN.

Objective: Summer internship in chemical process or operation engineering

that will allow for work in both an office and plant setting

Education: Bachelor of Science, Chemical Engineering

May 2027 GPA: 3.12

Rose-Hulman Institute of Technology, Terre Haute, IN

Related Courses: Process Control, Statistical Methods in Six Sigma,

Minor in Biochemistry, Concentration in Energy Production and Utilization

Applications of Heat and Mass Transfer, Fluid Mechanics, Organic Chemistry

Skills

Experience: *Technical*: Experience with the development of test methods and protocols

Six Sigma trained, familiar with HPLC Systems

Computer: Proficient in DeltaV DCS, PI Datalink, Aspen, MS Visio, Microsoft Office Personal: Leadership and management developed through Stage Manager position

Language: Eight years conversational Spanish; seeking minor

Project Experience:

3D Printable Chocolate

Aug - Nov 2024

- Performed laboratory tests to create a mix with ideal viscosity and cooling rate
- Designed a 3D printable mix that could be scaled for mass production
- Created manual to troubleshoot 3D printer clogging issues

Acetic Anhydride Synthesis

Feb - May 2024

- Collaborated with a team to design an Experimental Plan for data collection
- Calculated properties of component streams in a process
- Process included 47 streams, including boilers, coolers, reactors, driers, and separators

High Performance Liquid Chromatography

Nov - Feb 2024

- Utilized a HPLC system to separate caffeine and aspirin from a tablet
- Created calibration curves to determine the amount of aspirin and caffeine
- Analyzed output to quantify the moles of each component

Standardization of Sodium Hydroxide

Aug - Nov 2023

- Applied principles of titration, acid base equilibria and standardization
- Found molarity of sodium hydroxide accurate to the fourth decimal
- Used the standardization process to find acidity of a monoprotic weak acid

Rose-Hulman Institute of Technology, Terre Haute, IN Experience:

2024-2027

Grader for the Chemical Engineering Department

Responsible for grading homework in Thermodynamics 1

Sophomore Advisor for Student Affairs Department

Mentor and role model for first-year students

Activities: Rose Drama Club, Stage Manager

> Blue Key Honor Society, member and Special Events Co-chair Maryland Community Church, Stage Crew Assistant Leader Alpha Chi Sigma (chemistry professional fraternity), member

SAMPLE RESUME #4: When you have lots of internships

First, if this is the format you need, congratulations! We still want you to keep the resume to one-page, so this example demonstrates how to maximize your space. Having a good blend of work and project experience is still important, so make sure you save room for variety.

Here is a sample resume used for people who have internships, co-ops, and more



CIVIL ENGINEERING

812-257-6284 | Indianapolis, IN 46803 | kylemoon@rose-hulman.edu

Objective: Full-time employment to build on my technical expertise and continue to work towards P.E.

Education: Master of Science, Structural Engineering May 2025 **Bachelor of Science, Civil Engineering** May 2025

Rose-Hulman Institute of Technology, Terre Haute, IN **GPA: 3.78**

Skills

Experience: Communication: Public Speaking, Marketing and Design

Software: Latista, Planswift, GSI, Auto Cad, Advanced Excel Work, Bluebeam Revu

Equipment: Welding, Auto Cad, CNC Milling

Construction: General Carpentry and Maintenance, Masonry

Internship **Experience:**

United Consulting Engineers, Indianapolis, IN

Jun - Aug 2024

Engineering Intern, Water/Wastewater Department

- Drainage area calculations and design for CSO overflow projects
- Civil3D design of potential pipe alignments and mark-ups of engineering drawings
- Attended client meetings and headed communication on project-specific work

Bulley and Andrews LLC, Chicago, IL

Jun - Aug 2023

Project Intern

- Data learning and AI in Excel used to improve estimating accuracy
- Performed take-offs on detailed Engineering Drawings by hand as well as in Planswift
- Procured equipment and subcontractors on a project-by-project basis

IEA Renewable Energy, Clinton, IN

Jun - Aug 2022

PE Intern

- Advanced work in Excel for business purposes
- Reviewed and organized detailed engineering drawings
- Managed client relationship and oral communication between all contractors

Design **Experience:**

Stormwater and Wastewater Management, Ayeduase, Ghana

Jun 2024- May 2025

Design Engineer and Project Manager

- Managed communication with international client and transfer of data
- Designed stormwater and wastewater collection system and treatment plant to serve a small community
- Prepared and edited design drawing using Civil3d and Bluebeam Revu for client

Leadership: Concrete Canoe, President

Science Olympiad, Team Leader RHIT Rock Band, Guitarist Habitat For Humanity, Volunteer

Activities: Surfing, Aero Robotics, Drumming

SAMPLE RESUME #5: Fitting it all in

When you've gained experience and it seems impossible to include everything, there are a number of formatting tricks you can use to make the most of the space you have to work with, maximize your content, and make your resume work hard for you.

Here is a sample for those who have a lot of information to fit onto a single page

JENNIFER M. MARLEY

(555) 867-5309 marleyj@rose-hulman.edu

EDUCATION

Bachelor of Science, Mechanical Engineering; Minor, Economics

Rose-Hulman Institute of Technology, Terre Haute, IN

May 2022

GPA: 3.72

SKILLS EXPERIENCE

Computer: CATIA V5/V6, Siemens NXT, MATLAB, SOLIDWORKS

Technical: Rapid prototyping, sheet metal and casting, design for manufacturing, material testing, Geometric Dimensioning and Tolerancing

INTERNSHIP EXPERIENCE

SpaceX (Hawthorne, California) Starship Engineering Intern, Structures

Jun-Aug 2021

- Designed primary and secondary structural components for the Starship and Super Heavy programs
- Served as the design lead for interstage ring frames and booster grid fin supporting structures
- Owned aerothermal cover development for booster quick-disconnect systems
- Redesigned structural components to accelerate and simplify critical path build processes
- Lead fast-paced development tests for prototype assemblies

Tesla (Fremont, California) Mechanical Design Intern, Exterior Systems

Jun-Nov 2020

- Designed and analyzed electromechanical systems for vehicle prototypes and low volume production
- Undertook windshield wiper development for a new vehicle program as engineering point of contact
- Developed a rework project to meet program checkpoints and expedited system development by two weeks
- Performed analysis on the Semi mirror hinge system to target autopilot vibrational requirements
- Managed supplier relationships and led cross-functional development between global engineering teams

Tesla (Fremont, California) Manufacturing Innovation Intern, Materials

Sept-Nov 2019

- Created mathematical models and analytical tools to predict the mechanical capabilities of glass parts
- Executed studies to resolve challenges in Armor Glass manufacturing
- Wrote test plans to validate glass compositions after recommending cost-optimizing changes
- Conducted material impact tests and interpreted results to forecast glass performance over time
- Facilitated relationships with equipment and material suppliers

Rolls-Royce (Indianapolis, Indiana) Systems Design Intern

Jun-Aug 2019

- Tracked and coordinated design-integration and configuration changes on the AE3007N UAV turbofan
- Resolved and presented fastener design changes for technical approval and validation
- Configured custom build kits for the AG9140 marine power generator
- Identified and resolved turbofan inlet misalignment errors and wrote supplier coordination memos

EXTRACURRICULAR EXPERIENCE

Rose-Hulman Institute of Technology | Student Body President

Feb 2021-2022

- Represented the student body at Board of Trustees and donor events
- Managed student organization and institute extracurricular spending
- Spearheaded student initiatives and capital campaigns

Rose-Hulman Efficient Vehicles - Shell Eco-Marathon Team | President

Mar 2021- 2022

- Managed development timelines for super-mileage vehicle development
- Designed and fabricated structural and exterior systems for competition vehicles
- Oversaw component and system level design decisions
- Founded an electric powertrain development team for new vehicle prototypes

Rose-Hulman Institute of Technology Student Government Association | Vice President

Feb 2020-Feb 2021

- Served as the chair of student government meetings
- Oversaw the leadership of all on-campus student organizations

LEADERSHIP AND COMMUNITY AFFILIATIONS

- National Society of Black Engineers (NSBE), Member
- Alpha Tau Omega Fraternity, Pledge Class President, Member
- Rose-Hulman Institute of Technology, Quality of Education Board Member

The Cover Letter

Let's face it; no one wants to write a cover letter. In fact, there are articles that say 90% of employers don't read them anyway. So, are they necessary? The answer is yes if they are well written. Cover letters can impress a hiring manager in ways a resume alone cannot. It helps answer the question, "Why should we invite this person for an interview?" Remember: The job application process is extremely competitive.

The job will go to the person who shows the most effort and the most interest.

THE EASY WAY IS RARELY THE RIGHT WAY

The easy way to write a cover letter is to create a generic version and use it for all your applications.

However, if you plan to make a generic cover letter, then you might as well not make one at all. It is believed that a recruiter will devote no more than 30 seconds to your cover letter, so make every word count!

Generic cover letters tell an employer:

- You are not really interested in their specific company or position
- You are lazy because it took too much time and effort to tailor your cover letter
- You are probably applying to anything and everything, and their company really doesn't matter

Here are the basic guidelines when developing cover letter content:

GREETING

Address your cover letter to a specific person. You can utilize Career Shift and LinkedIn to find a specific person. Begin with Dear and their title (Mr., Ms., or Dr.) followed by the last name of the person and a comma (Ex: "Dear Ms. Blanchard,").

Never use only the first name of the addressee; it is too impersonal and unprofessional. If you really want this position, exhaust all ways of finding a contact name before going generic. When you must use a generic salutation, "Dear Hiring Manager" is much better than "To Whom It May Concern."

FIRST PARAGRAPH

Clearly and concisely express who you are, what you are writing them about, and where you heard about the position. Follow up with a thesis statement to set the structure for the rest of the document.

Example: "I am a sophomore mechanical engineering student at Rose-Hulman Institute of Technology, and I am writing regarding the manufacturing intern position posted on Indeed.com. I believe I am an excellent fit for the role based on my experiences both in and out of the classroom.'

BODY PARAGRAPHS

Your thesis statement should provide structure to your cover letter. In the example above, the thesis statement calls for a paragraph about your experiences in the classroom (academic background) and your experiences outside the classroom (internships, work, clubs, and organizations).

Demonstrate your knowledge of the company and why it interests you. This is where you subtly let them know you have done your research, and you are certain you would make a good fit.

Example: "This must be a very exciting time for your company, as you make the transition into infrared technology. I have been researching this type of work, and when I read about your latest project on LinkedIn, I immediately searched for job openings at the Louisville location, where most of the testing and prototyping is done. By combining my mechanical background with my computer knowledge, I am confident my skills would fulfill your needs."

- Show you are qualified for the job. Summarize your relevant background by mentioning specific skills and experiences you have that apply to the position. Connect the dots between your experiences and their needs. If you are replying to a posted ad, then make sure to incorporate keywords used in that posting.
- Be specific. DO NOT just restate what is already on your resume. Show proof of your claim by using an example.
- Stay positive. DO NOT mention any weaknesses, such as a low GPA or lack of experience.

Example: "As a member of the Human Powered Vehicles Team, I have extensive design experience that would allow me to immediately contribute to your current projects. I understand you use SolidEdge for your modeling software, and I have been designing with SolidEdge since high school."

Example: "In addition to my degree in mechanical engineering, I am also minoring in computer science. My experience developing C and C++ programs for embedded systems using Intel processors would make me an asset to your existing engineering team."

CONCLUSION PARAGRAPH

Encourage further communication. Mention your resume is attached, and that you are interested in learning more about the position as well as their company. Express your eagerness to work for them, and do not forget to thank them for their time.

CLOSING

Keep it simple—"Sincerely" works just fine. That's it! Add your name and email/phone number to the bottom, and DON'T FORGET TO INCLUDE YOUR RESUME

Formal Cover Letter Layout

Heading From Your Resume

Date

Contact Name, Contact Title Company Name Company Address

Dear Mr./Ms./Dr.

Immediately explain why you are writing this letter. State your academic status and how you heard about the job or company. You need to catch their attention right off the top so they will keep reading. Use a thesis statement to do so!

Highlight your skills and qualifications. Whether that is through coursework, projects, past work experiences, etc. Remember to keep it short, and do not just repeat what is in your resume. They want to know how you can contribute to their company. Why should they hire you?

Tell them why you want to work for them, specifically. Nothing generic! This is where they realize you have done your research, you know what their company does, and you explain why you want to be a part of it.

Refer the reader to your enclosed resume. Indicate your desire for follow-up communication.

Sincerely,

Your Signature

Your Name

Email Cover Letter Example

Dear Ms. Johnson,

Most people start studying engineering in college, but I got my start when I was 10 years old. I am now a sophomore mechanical engineering student at Rose-Hulman Institute of Technology, pursuing my passion for the automotive industry. I learned about GM's internship program through Handshake, and I am eagerly applying for the position. My automotive background and experiences at Rose-Hulman make me a desirable candidate for the internship program.

It all began in my dad's auto shop when he and his workers explained the parts of an engine and how they all work together to make the car move. I started doing oil changes at age 12, and my dad and I rebuilt a '57 Chevy when I was in middle school. Five years later, that '57 Chevy is my main mode of transportation every day.

In college, when I am not practicing with the baseball team or tutoring in the Learning Center, I spend my free time in the Student Innovation Center, working on projects with the Grand Prix Engineering Team. I would value the opportunity to speak with you about these experiences and how I am certain I could contribute to the internship program at General Motors.

I applied online, but I have also attached my resume for your consideration. I look forward to speaking with you about my qualifications. If you need any additional information, you can reach me via email (ima@rose-hulman.edu) or cell phone (111-111-1111).

Sincerely,

Ima Student

Email Correspondence

Email is the standard communication method in the job application process. However, before you use email to correspond with an employer, make sure you think through the content and subject line so that it works as an efficient tool. This must be the most professionally written email you have ever sent.

Every word counts!

COMMON MISTAKES:

- Using emoticons © (3)
- Being too informal
- Misspellings and poor grammar
- No capitalization or using ALL CAPS
- Using text shortcuts (btw, omg, lol, etc.)

Type the cover letter right into the body of the email. removing the date and address blocks. Just start with the salutation and begin writing. Make sure you mention that your resume is attached!

Here are some things to consider when writing a professionalemail:

- Always open the same way you would in a cover letter "Dear Mr./Ms./Dr. So and So:
- In the subject line make it obvious why you are writing "Application for Process Engineer Internship Position."
- Use spell check and proofread it. There is no room for error in this correspondence.
- Use a standard font style and size. Aptos is fine and keep it between 10-12 point.
- Name your attachment effectively: "your name: resume date" Employers receive hundreds of resumes, and they need to be able to separate you from the others by name.
- Stay professional: Do not assume that if an employer is informal, that you should be.

Career Services & Employer Relations would be happy to review your correspondence before you send it. You can either stop by in person, or simply email it to your Career Advisor.



Other Professional Communication

THE THANK-YOU LETTER or EMAIL

A well-written and professional "thank you" is one of the most important steps in your job search. Send a thank you as a follow-up to any communication (interview, phone conversation, written reply, etc.) with an employer or networking contact. This is the time to express your appreciation, re-emphasize your strong qualifications, reiterate your interest in the position and the company, or provide additional information that will convince an employer you are the best candidate for the job. Make sure you reference your past conversation with this person, and if you met with several people, it is good practice to send an individual thank you to each person.

ACCEPTING OR REFUSING AN OFFER

The best way to accept or reject an offer, whether that is an offer for employment or even just an offer to interview, is to do it in a phone call. Then, follow up with an email. Accepting an offer is easy! But letting a company know you aren't interested can be difficult.

Your refusal should:

- ✓ Thank the employer for their time as well as any special accommodations they made.
- ✓ Let them know you have decided to go in a different direction and are no longer available.
- ✓ Include well wishes and hopes of possibly working with them in the future.

THE LETTER OF INQUIRY/INTRODUCTION

When you have interest in a particular company, but you have not applied to a specific job posting, a letter of inquiry gives you a way to introduce yourself and ask about employment opportunities.

This format is very similar to a standard cover letter. Make sure you state the type of employment you are seeking(internship, co-op, full-time, etc.).



Thank-You Letter

Dear Mr. Thompson,

I enjoyed meeting with you at the Rose-Hulman Career Fair last week. I was very impressed by the teamwork demonstrated by your staff as well as your commitment to environmental safety.

I wanted to reiterate my genuine interest in the production intern position at WOW Chemical, and as I mentioned during our conversation, I am certain my past research in polymers make me a qualified candidate.

I look forward to speaking with you again in the near future.

Sincerely,

Joe Student

Letter of Inquiry

Dear Mr. Brody,

I am a junior electrical engineering student at Rose-Hulman Institute of Technology. I am specifically interested in microcontrollers, and while researching the industry, I discovered Miffco Electronics. I am writing to inquire about summer opportunities with your company.

In the spring I will be enrolled in an advanced controls course, and last summer I gained realworld experience with one of your competitors, HKM, and I am certain my skill set would be useful on your current project.

I have attached my resume for your review, and I would appreciate the chance to speak with you about my qualifications for employment at Miffco. I can be reached via email at ash@rose-hulman.edu or by cellphone at 111-111-1111.

Sincerely,

Ashley Student

Creating an Online Portfolio

According to Forbes, 56% of recruiters are more impressed by a personal portfolio than any other branding tool, however, only 7% of job seekers have one. An ePortfolio is an extension of your resume – it adds a visual (and sometimes audio) element to your work. It is your chance to "show," not just "tell."

A career portfolio is a calling card – a tangible demonstration of who you are, and what you offer. It's how you stand out from the competition and get others to take notice. Gone are the days when resumes were enough. Think of it as a sales brochure, and YOU are the product.

What to Include?

- 1.Lab Reports: Convert reports you have done in labs into a PDF
- 2. Research: Showcase reports or papers you have submitted for class
- 3. Presentations: You can embed a slide show or PowerPoint, or a recording of your presentation
- 4. Certifications: If your future career requires any type of certifications, put them on display once you earn them Examples include security clearance status, Six Sigma certification, etc.
- 5. Projects: Many of you take pictures and videos during the design process of your academic projects. This is where you show them off!

HOW? Start Simple

- 1. You can start with a PowerPoint presentation displaying all your work
- 2. Create an online portfolio: we recommend WordPress, WIX, LinkedIn, Weebly
- 3. Choose a portfolio design that best represents your work
- 4. Don't forget your personal contact information should be visible on all pages
- 5. Experiences/education/projects/skills sections just like a resume, but with visual aids
- 6. Think about embedded videos, images, links to external resources, etc.

Here are some of the most popular resources:





This is the easiest place to start and there are millions of people using this platform. Enhancements are frequent and you can add projects, documents, and even video samples of your work.





Wix is ideal for creating an online portfolio with its customizable templates and intuitive interface. It supports multimedia integration and offers a free domain for the first year, simplifying professional online presence setup.

Example

Websites that will host your online portfolio for free

How to Get the Most from a Career Fair



The Rose-Hulman career fairs are professional events which provide an opportunity for students to network with companies. Whether you are looking for an internship, co-op, or a full-time job, bring your "A" game - companies want to be impressed.

PREPARATION IS EVERYTHING!

It is especially important to be prepared before showing up for a career fair because you do not have much time, and you want to put your best foot forward. Recruiters will tell you they spend very little time with students who show up unprepared.

RESEARCH AHEAD OF TIME

Handshake provides you with a list of companies and known facts about the companies that register to attend the Rose-Hulman career fairs. Recruiters are always impressed at how prepared Rose-Hulman students are when they talk to them. You must leave an impression that you did your homework, and there is a reason they should hire YOU.

What to Bring

- Multiple copies of your resume
- Notes from the research you have done on the companies in attendance
- A folder/portfolio to keep your information organized
- Pen/pencil for notes
- Breath mints!

What to Wear

- Professional attire (suit, blouse/dress shirt and slacks or skirt, or a dress in conservative colors and style)
- Comfortable dress shoes (not flip flops or tennis shoes!)
- No strong cologne or perfume

PLAN OF ATTACK

Hundreds of students, hundreds of businesses, but only a limited amount of time - so how do you make the most out of the career fairs?

- Check in to get your name tag and a map. Check in at the fair, or early check in at the Career Services Office is now available – watch for dates and times.
- Plan out your top 10-15 companies you want to visit and research them in advance. Take notes.
- 3. Start with the bottom of your company list and work up.
- Review your notes before talking to a recruiter.
- 5. Have your resume in hand, and your :30 sales pitch ready.
- 6. Take a deep breath... SMILE!

THE 30-SECOND SALES PITCH

It is important that YOU start and carry the conversation. Follow this four-step formula to ensure you make the best first impression.

- 1. Thank them for the opportunity to speak with them.
- 2. Introduce yourself and tell them why you are interested in their company.
- 3. Use why you are interested in their company as a segue. Identify key things you want them to know about you. Relate your experiences to their needs.
- 4. End with a question. Have relevant questions for them, which will show you did your research. By ending your pitch with a question, you create the opportunity to continue leading the conversation. If you do not end with a question, you can be sure they will ask you a question, or (worse!) end the conversation.

Overall, your goal is to sell your experiences and your leadership and teamwork skills as solutions to the employers'needs.

The Internship & Job Search Formula

It is hard to know where to start your internship, co-op, or full-time job search. Once you start searching, it is equally as hard to know what pattern to follow to optimize your success. In addition to meeting with your Career Advisor to create an individualized plan, use the following list of search engines as well as the following flowchart to maximize your search.

START HERE—OUR FAVORITE SEARCH ENGINES

- 1. Handshake Jobs posted to Handshake are posted just for Rose-Hulman students. It helps cut down on the noise for both you and the hiring managers.
- 2. Career Shift Career Shift, linked through your Handshake account, is like the Swiss Army knife of your job search. In addition to looking for jobs, you can find company information and contacts with emails
- 3. Indeed.com Unlike Handshake, this job portal is worldwide, and your competition is anyone and everyone. However, it is a great resource when you are looking for something in a specific location. The filter system allows you to narrow the search criteria very effectively.
- 4. LinkedIn When paired with Career Shift's contact search feature, LinkedIn is a powerful tool for finding the right individuals to connect with in order to get your application noticed.

Ultimately, it is important to use multiple search engines, and then apply to the jobs you identify by using the pattern in the following flow chart. Do not skip the step of tracking the jobs you are applying to using a spreadsheet. It helps you ensure that you are correctly following up on your applications.

Job Search Tracker

Creating a Job Tracker is a great way to start your job search and help keep it organized.

Recommended options are Excel or Google Sheets, but you can use whatever format works best for you. Using Excel or Google Sheets, you can organize by using the page tabs. Many will use the page tabs to separate companies by:

- 1. Companies I am interested in, but they don't have posted jobs
- 2. Companies that I have applied to
- 3. Companies from Career Fairs
- 4. Companies based on specific locations
- 5. Companies based on specific industries

Job Posting	Company	Company Contact	Application		Name/Contact	Date Thank you	
(Hyperlink)	Contact/Title	Email/Phone	Date	Interview Date	of Interviewer	Sent	Notes:
						*if you	
			*you should			had an	
			follow up	*you should		interview,	*track your activity
*link the			with a	send your	*write this	this	for each company.
actual job	*try using CareerShift for		company	thank you	down AT the	column	This will help create
posting for	contact inform	ation, available in	within 48	within 24	interview so	should	a timeline for when
quick	Handshake. As	sk Career Services	hours of	hours of an	you don't	never be	you should take a
reference	for help!		applying!	interview	forget it!	blank!	follow up action

The Job Search for International Students

We know the job search for international students is even more difficult than for domestic students. It is true there are certain employers who will only hire U.S. citizens. Do not take it personally! We also know it can be confusing – we're here to help.

There are many ways you can benefit from Career Services & Employer Relations:

- Attend workshops on job search strategies, designed specifically for YOU!
- Attend career fairs and company information sessions to learn about job opportunities and to practice your networking skills.
- Start your job search strategy early and stay in regular contact with your designated Career Advisor.

JOB SEARCH TIPS

 Know where the jobs are. Certain career fields are more open to sponsoring international students, and there are states that have a reputation of being more open to hiring international students. Try focusing your search on California, Texas, and New York.

Other things you can do include:

- ✓ Look at companies that are exporters to, or do business with, your home country
- ✓ Research U.S. companies active in your language region
- Network with people from your home country who are owners of companies
- Network with people from your home country who have jobs in the U.S.
- Network with international alumni who now have jobs in the U.S. (internships or H1-B)
- ✓ Ask your home country consulate
- Attend international job fairs (google this to find these events in major cities)
- . Communication skills are critical: You already have a disadvantage: English is likely not your first language, which means your verbal and written skills do not compete as well with U.S. candidates. You need to step outside your comfort zone and embrace the U.S. culture while you are here. Join clubs and participate in campus activities to build your English communication skills.
- Timing is everything: In general, as an international student, you will have 60 days after graduation to either enroll in another college program for further studies or enroll in an OPT (Optional Practical Training) program to gain employment after you graduate from college on an F-1 visa. If this does not take place within 60 days, you will have to leave the U.S.
 - The OPT program allows you to extend your F-1 visa status for a year while you work, train, or intern in your area of study (up to 3 years for a STEM degree). Applying for an OPT program can take several months, so you should apply as soon as your application window opens before graduation. Check with the OPT Coordinator in Career Services to learn the earliest allowed application date. If you want to stay in the US for a longer period, you will need a company to sponsor you for an H-1b nonimmigrant visa. This visa will allow you to remain employed at that company for up to three years.
- Understand the laws: You need to become knowledgeable about the immigration laws and regulations that affect your employment eligibility based on your visa.

You are responsible for fully understanding your options so you can communicate them clearly and confidently to the employer.

Once you have decided to pursue an internship or remain in the United States to work after graduation, make sure you meet with the OPT/CPT Coordinator in the Career Services Office.

You also have the option to remain in the United States to pursue a graduate program. Reach out to your immigration advisor for more information on how this process works. Your international programs office can direct you to this person.

PREPARING FOR AN INTERVIEW

It is common to feel uncomfortable with American-style job interviews; they often conflict with your own culture and values. One way to ease any fears you may have is to understand what to expect and what will be expected of you. Such as:

- Honesty- Don't tell them what you think they want to hear, tell them what you know. A recruiter cannot determine if you are a good fit for their company if you make up answers.
- Punctuality- Being on time means being at the interview ten minutes before it is meant to begin. Do not be late!
- Confidence- Although your instinct might be to act modest and humble, this can make you look weak. Talk about your skills and successes, it is okay to brag a little, just be careful not to sound arrogant.
- Speak slowly and carefully- If English is not your first language, clear communication with your interviewer may require extra effort. Try to make this as easy as possible, even if it means speaking slower and louder than feels natural.
- · Ask for clarification- If you do not understand the question, tell them! Do not try answering a question that doesn't make sense, they will be happy to reword it for you.
- Always have questions- Typically, at the end of an interview, a recruiter will say "Do you have any questions for me?" Always prepare questions. It shows that you are engaged and interested in the conversation and the company.

Interview Tips



LOOK THE PART

Research shows that in less than 10 minutes of an interview, the recruiter decides whether to seriously consider you for the position. This is partly based on your appearance. Do not hesitate to ask if they have a preferred attire for the interview. You should always assume the dress is Business Professional, and *not* Business Casual. Here are some definitions:

- Business Professional: The most formal and conservative style of dress. This may include a dress, pant suit, skirt suit, or dark dress pants with a sport coat or blazer. Suits should be of conservative color (such as black, gray, or navy) and worn with a dress shirt or blouse. A tie is an appropriate accessory, often expected to be worn with a suit. Dark dress shoes with dark socks as well as a low heel or flats with neutral stockings are appropriate footwear options.
- Business Casual: This is a more relaxed look but is still somewhat dressy. Slacks, dress pants, or a skirt may be paired with a dress shirt or blouse. Ties are optional, and coats are not expected.
- Casual: Even though the name implies casual attire, you should still be conservative—a nice pair of khakis and a nice button-down shirt. Ties are not a necessary accessory. Jeans and tennis shoes are still unacceptable.
- Always Appropriate: Hair should be clean and combed, with a recent cut. Do not use cologne or perfume and go conservative with the jewelry. Makeup should be kept simple. If you wear nail polish, use a neutral color. Brush your teeth and use mouthwash. Don't forget to use deodorant. Do not smoke before the interview. Do not chew gum during it!

KNOW YOUR LINES

The purpose of the interview is to obtain knowledge about your skills, qualifications, and whether you are a "fit" for their company. Preparation is everything.

- Understand the job, the organization, and where you would fit in
- Be able to identify your main strengths and provide supportive evidence
- Have specific examples of situations you have been involved with ready to go
- Understand your goals and objectives
- Know your resume inside and out
- Practice, practice, practice

KEY POINTS

- Top companies want to hire ENERGETIC, PASSIONATE PEOPLE!
- Personality is key...relax and let your personality come through!
- Eye contact is critical. You must be able to look them in the eye.
- Watch your body language- no squirming in the chair, picking pimples, or scratching your head.
- Demonstrate that you have the ability to sell your ideas, and that you can influence others.
- Remember...most companies want the "WOW" factor from a candidate!



Be a "STAR"

It's never wise to think you can "wing it" when discussing your experiences and yourself. Instead, take the time to reflect on tangible examples that effectively showcase your personal skills and characteristics. preparation will make you a STAR. The best responses illustrate your skills and abilities by describing specific instances when you demonstrated them in the past.

The answer should include three parts:

- Situation or Task the reason you took a particular course of action
- Action be sure it's something specific you actually did
- Result. Results don't always have to reflect a success. Recruiters are just as impressed by what you learned in a situation, and how you would do it differently next time.

PHONE/TEAMS/VIDEO INTERVIEWS

You should prepare for these interviews in the same way you would prepare for an in-person interview. Dress up, develop eye contact with your laptop's camera, and watch your body posture. Also, look at what is behind you. What will the recruiter see during your interview? It is smart to create a "professional" looking area so that it is less distracting.

If you need a private place to conduct a phone interview, contact Career Services & Employer Relations to reserve one of our interview rooms.

Situation/Task



Action Result Here is an example of a "STAR" response to an employer's question about a student's less-thanimpressive GPA:

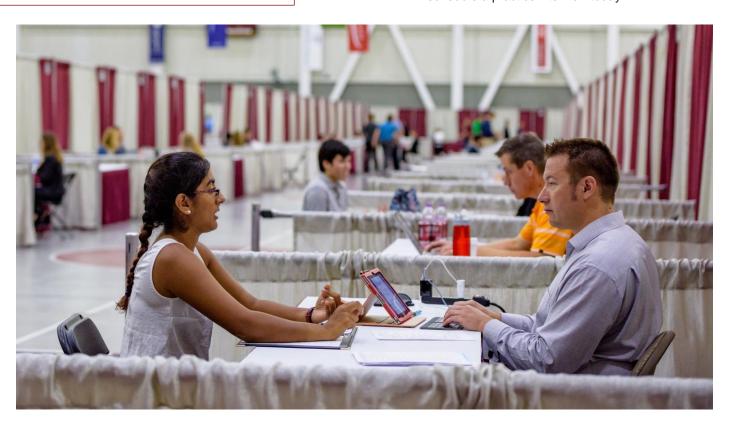
Situation/Task—"I entered my sophomore year with a low GPA. I had always done well in school, but I never really had to study. I knew if I wanted to succeed, I had to develop better study habits and manage my time better.

Action—"I created a calendar and marked the due dates for all my assignments and tests. Then, I set aside certain hours each day for studying, allowing more for peak times like mid-terms and finals. I made up my mind not to change the plan until after the first quarter grades so I could give it a chance to work."

Result—"My grades improved immediately; I used this system for the full year and earned a 3.1 while still having time for other activities. My GPA has been strong ever since."

Answering your interviewer's questions with a STAR answer will help you avoid long rambling answers that tell nothing about your skills, abilities, and strengths as they relate to the position. Your interviewer will be positively impressed and will have the kind of information needed to assess your fitness more objectively for the position.

Want to practice your STAR responses? Schedule a practice interview with Career Services & Employer Relations. Email your Career Advisor to schedule a practice interview today!



Questions Often Asked by Interviewers

The questions below are divided into eight categories.

These categories reflect the competencies employers want candidates to exhibit.

ORAL/WRITTEN COMMUNICATION

- Tell me about yourself. This question, simple as it sounds, causes more interview grief than almost any other. This question is NOT an invitation to talk about your hometown, your family, or your love for cats and dogs. Use this as an opportunity to present your qualifications, skills, and strengths as they relate to the position; thus, leading to the conclusion that you are, indeed, the right person for the job.
- Why are you interested in my organization? Why this position? This is where your research pays off. Give an answer that shows you were interested enough to find current information about the company.
- What do you know about my organization? Ditto to the above question.
- How would your friends describe you? This is a variation on the "strengths and weaknesses" questions.
- Discuss your experience drafting technical reports.

CRITICAL THINKING & PROBLEM SOLVING

- Tell me about a time when you faced a difficult problem you initially failed to solve. How did you approach the problem the second time? What did you do differently? Sometimes interviewers will ask questions about negative experiences. Be sure to emphasize lessons learned from the experience and how those lessons enabled you to handle similar situations successfully.
- What was the most difficult decision you have made in the last six months? Explain how you went about making this decision.
- What unpopular decision have you made recently? How did others respond?
- Describe a time when a project did not work out the way you intended. How did you handle it?
- Give an example of a time when you were required to make a split-second decision.

TEAMWORK & COLLABORATION

- Tell me about a situation when you had to be a good team player. Explain your role on the team.
- Talk about a tough group you had to get cooperation from. What was the issue, and how did you go about it?
- Have you managed a group of people in the past? If so, how did you build the group's sense of teamwork so the members could work more cohesively together?
- Can you share an example of a situation in which teamwork enhanced your ability to accomplish your goals or the outcomes that were expected from you as a team member?
- What role do you tend to play when working with a team?



LEADERSHIP

- Give me an example of a time you used your leadership skills. What was the outcome?
- What are your strengths? This is strictly a job-related question. Describe your strengths relative to the job you are seeking.
- Why should I hire you for this position? Another variation on the "strengths" question.
- Your weaknesses? This is a trick. Your weaknesses could be a strength in disguise. Or choose something you have had to work to overcome in order to succeed and explain how you've learned to keep it from being an obstacle.
- What has been your greatest challenge thus far? What steps have you taken to meet that challenge?

PROFESSIONALISM & WORK ETHIC

- Give me an example of a crisis situation and how you dealt with it.
- Give me an example of a situation in which you had to manage time effectively (or set priorities).
- How do you respond to rejection? Criticism?
- Talk about a difficult goal you have set for yourself.
- What questions do you have for me to answer? Ask questions that show your interest in the company and position. Show off the research you have done!



TECHNOLOGY

Companies will often ask you technical questions to gauge your abilities in this area. In addition to answering questions verbally, they may ask you to solve a problem on a white board. If you don't know how to answer the question, tell the interviewers how you would go about finding the answer. See the examples below.

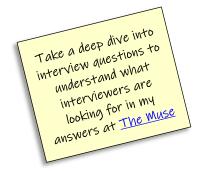
- How did your education help prepare you for this job?
- The Sciences: In the lab, what are you good at? Where can you improve?
- Software Engineering: Write a program which reads a positive integer N and then prints an "N times table" containing values up to N * N.
- Civil Engineering: What is the required information to repair a midbeam in a building?
- Mechanical Engineering: How would you clearly explain a car's wheel and axle system to a layperson?

QUESTIONS TO ASK THE INTERVIEWER

- What kind of assignments might I expect during my first six months on the job?
- · How would you describe a typical workday?
- Who are the people I would be working with and what do they do?
- What are the company's policies on continued education?
- If I am hired for this job, and perform well for a number of years, what opportunities might this lead to?
- How would I get feedback on my job performance, if hired?
- What skills are considered most useful for success in the position I am applying for?
- I have noticed in the trade press that your firm has an excellent reputation in marketing. What major insights about the marketing process might I gain from this position?
- I would really like to work for your firm. I think it's a great company, and I am confident I can do this job well. What is the next step in the process?
- Is there anything else you need to know about me that we haven't had a chance to discuss?

QUESTIONS NOT TO ASK

Never, never, never ask any questions about salary, vacations, holidays with pay, sick days, or benefits until you have the offer.





CAREER MANAGEMENT

- Why have you chosen this career field?
- · What are your short-term and long-term career goals?
- Where do you see yourself five years from now? Your answer should reflect a career path starting from the position you are interviewing for. It's crucial to research the company and role. Consider putting the question back to the interviewer. "Let me ask you, Joan, starting in this position, if I do really well, where could I expect to be with XYZ company in five years?"
- What are your plans for graduate study? Consider your response carefully as employers prefer candidates committed to staying in the job. You might say something like "Well, John, my plans are to continue my studies parttime while I work. What are your company's policies regarding continued education?"
- What salary do you expect to receive? Avoid answering this question with a specific figure. Be vague. Say you are looking for a competitive salary. If you must use numbers, say something like "Oh, somewhere in the mid-60s."



INTERCULTURAL FLUENCY & EQ

- · Why did you choose Rose-Hulman?
- Which courses and professors have you enjoyed the most? Why?
- Which organizations have you participated in? What have you learned from your involvement?
- · How do you manage stress after a difficult day?
- What have you learned from your previous jobs? Under which type of supervisor do you work best?
- · How do you celebrate success?
- Describe a time when you worked with someone with beliefs or attitudes different from yours. How did you work together?

What Happens During an Interview?

INTERVIEWING PROCESS OVERVIEW

The interview process can be daunting if you don't know what to expect, but all interviews follow a general pattern: beginning, middle, and conclusion.

TYPICAL INTERVIEW STRUCTURE

Five minutes: Small talk

 Fifteen minutes: Discussing your background and credentials

• Five minutes: Your questions

Five minutes: Conclusion

Interviews are usually about 30 minutes long, so be concise and organized in your responses.

IT STARTS BEFORE YOU EVEN SAY HELLO

The interview starts as soon as you're identified. Shake the recruiter's hand confidently, even if it means extending your hand first to show assertiveness. Arrive at least 15 minutes early to prepare—review your notes, calm your nerves, and keep your hands dry.

HOW'S YOUR SMALL TALK VOCABULARY?

Recruiters often start with small talk on topics like the weather or sports, not your skills. However, you're still being evaluated. They're assessing your informal communication skills, so engage actively and don't just smile and nod.

THE RECRUITER HAS THE FLOOR

The main interview begins when the recruiter discusses the organization. If their descriptions are vague, ask questions to understand the job and company clearly.

When discussing your qualifications, be ready to address any potential negatives, like a low GPA or lack of related work experience. Explain any positive aspects, such as supporting yourself through college or relevant project experience.

Recruiters often ask why you chose your major or what your career goals are to gauge your direction and motivation. Demonstrate your purpose and drive through your answers.

EXPECT THE UNEXPECTED

During the interview, you may encounter unusual questions like "Tell me a joke" or "If you were an animal, what would you be and why?" These questions test your reaction and composure under pressure. There's no way to anticipate them, so just think and respond naturally.

IT'S YOUR TURN TO ASK QUESTIONS

When the recruiter asks, "Do you have any questions?" it is important to have a few ready.

Asking intelligent, well-thought-out questions shows the employer you are serious about the organization and need more information. It also indicates to the recruiter that you have done your homework.

THE CLOSE COUNTS, TOO

The interview isn't over until you leave. The last five minutes are crucial, as the recruiter assesses your overall performance. Stay enthusiastic and courteous. If the recruiter stands, the interview is ending, but you can stand first if it feels right. Shake the recruiter's hand and thank them for considering you. Being forthright is a quality that most employers will respect, indicating you feel you have presented your case, and the decision is now up to the employer.

YOU ARE BEING EVALUATED FROM THE MOMENT THE INTERVIEW BEGINS

Interviews are designed to let a person get to know you, and how you would fit with their company culture and team.

Here are some of the things an interviewer is considering:

- Did you actually answer the questions that were asked?
- Does your body language indicate you are bored, nervous, or excited about the opportunity?
- · Can you make eye contact?
- Are your answers genuine, or do they seem rehearsed and fake?
- Did you do research on the company and the position?
- Can you demonstrate the skills needed to do the job?
- · Does your personality fit with the existing team?
- Will you challenge management, or respect decisions that are made?
- Do you know who you are and what you really want?

Internships and REU's

Hands on experience is invaluable as you build your career. There are opportunities available with a focus on industry - internships, and opportunities to pursue if you wish to engage in further education or work in research - REU's.

REU: Getting Paid to do Science Research over the Summer

What is an REU? REU (Research Experiences for Undergraduates) is an NSF (National Science Foundation) Paid Summer Internship. There are other summer programs not funded by NSF, but the same principles apply.

- A NSF internship for undergraduates who work in the research programs of the host institution
- Work on a specific research project, under faculty and other researchers
- Paid \$5,000/10 weeks, with free housing, travel, and food
- Must be a citizen or permanent resident (for federally funded programs) continuing college student after the summer REU
- 700+ REU Sites around the country and each site accepts only 6-10 students

What is Involved in an REU Application? Each REU site has their own online application that may include:

- Personal information
- Unofficial transcripts
- CV/Resume
- Include two strong letters of recommendation from college professors or former employers
- Personal statement or essay questions
- Due dates: most programs have a February deadline BUT many have rolling admission, so it helps to submit your application earlier if it is weaker (less competition)

What Makes an Application Stand Out?

- Strong academic background
 - o A's and B's in science classes and calculus (if weak, address this in essays)
- Desire to pursue a research career
 - o The NSF measures the success of an REU by how many REU alumni pursue a PhD or MD/PhD (not an MD). Therefore, if interested in a PhD, state that goal to increase the likelihood of being accepted
- CV/Resume: Provide context, details and motivation behind work experiences and organized participation
- Two strong letters of recommendation from professors/former employers
 - One letter must be from a science professor
 - o Get to know your instructors so they can write something personal and say more than "So-and-so took my 200-person class and got an 85% on the first test and a 91% on the final "
- Essays must be proofread, 2-3 paragraphs in length, and answer the specific questions asked
 - Have energy and enthusiasm for the research subject
 - o Show curiosity to learn more
 - Correlate previous work to the specific REU program
 - o State how your participation in the specific REU program will benefit your future academic and professional career
 - o When describing any previous research or coursework, state the meaning of the experience
 - o Do not convey in any way these sentiments: "this will be great for me" or "my career" or "I need (or think I do) this for medical/dental school"

NSF REU Sites



Internship: An opportunity to gain hands-on professional experience

Pursuing an internship not only allows you to gain professional experience but also to learn the skills you will need to manage your career. Everything in this manual addressing the job search is relevant to your internship search.

To begin, assess your current skills and experience to identify suitable internship opportunities. Here's how:



- Reflect on your experience: Consider past roles that could prepare you for specific internships.
- Highlight transferable skills: Identify skills from school or extracurriculars—like organization and critical thinking—that are valuable in professional settings.
- Pursue your interests: List career fields of interest and search for internships in those
- Start modestly: Begin with local organizations, school-affiliated groups, or volunteer roles to build your resume, especially if you lack prior work experience.

Pathways to Science



Graduate School Application: Planning Timeline

When applying to a graduate program, you'll need to gather and prepare various elements, many of which have strict deadlines. Most programs do not offer extensions and requesting one can reflect poorly on your professionalism and organization.

Typically, applications start in November with a January deadline, but this can vary by program. Each program may have its own deadlines, which may differ from those of the graduate school. Some programs offer multiple start dates or rolling admissions, affecting deadlines.

The timeline provided assumes a traditional fall start. Adjust accordingly for spring or summer admissions.

- Early Summer
 - Begin researching programs
 - Register for the necessary standardized test for your field
 - Use practice diagnostic tests to see how close you are to program testing score requirements
 - Study for required tests
- Late Summer
 - o Take appropriate standardized tests, leaving plenty of time to retake the test if needed
 - o Seek out advice and information from faculty members, admissions counselors, and peers
- - Research funding and begin applying for fellowships, internships, and assistantships
 - o Start work on your personal statement, CV, and, if needed, writing sample
 - o Create a calendar of the due dates for each school to which you plan to apply
- November-December
 - o Order transcripts to be sent to each program for which you are applying
 - o Finalize your personal statement, CV, and any other required materials
 - Fill out applications
 - o Request letters of recommendation no later than one month before they are due
- January-February
 - Submit all materials by the published due date
 - o If confirmation email(s) is not forthcoming, call the program office before the deadline to confirm your materials have been received
 - o Fill out the Free Application for Federal Student Aid (FAFSA)
 - Prepare for possible phone or campus interviews

Researching Graduate Programs

When contemplating graduate school, you must evaluate the experience both personally and professionally. Personally, consider factors like location, community, campus culture, and other nonacademic aspects that contribute to your overall satisfaction. Professionally, define your research interests, explore the field, assess faculty members, understand your funding options, determine workload expectations, and evaluate research resources.

Consider the Following Factors When Making Your Decision:

- Community
- Additional Certificates and Interdisciplinary Opportunities
- Funding Considerations
- Work Requirements
- Research Resources
- Profiling Programs and Statements of Purpose

Developing a Winning Curriculum Vitae (CV)

A Curriculum Vitae (CV) is a professional document used for marketing your background for a variety of purposes, mostly within academia or research. CVs are usually a minimum of two pages. It's very similar to a resume, but with more details.

COMMON USES

- Graduate school admission, graduate assistantship, or scholarship application
- Teaching, research, and upper-level administrative positions in higher education
- School administration positions (superintendent, principal, department head)
- Research and consulting in a variety of settings
- Academic departmental and tenure reviews
- College or university service appointments
- Professional association leadership positions
- Publishing and editorial board reviews
- Speaking engagements
- Grant proposal



GETTING STARTED

Start by brainstorming.

Make a list of everything you might possibly include, such as:

- Education history
- **Professional Organizations**
- Courses completed
- **Publications and Presentations**
- Research conducted o
- Skills and Qualifications
- Lab experience
- **Projects**
- Volunteer experience o
 - Certifications and Licenses
- Teaching experience o
 - Honors and Awards
- Work experience
- Activities

Do NOT include age, gender, race, marital status, ethnic background, height, weight, or religion

FORMATTING

It is important to ensure your CV is easy to navigate and will not confuse the committee that will be evaluating your application. Here are some basics:

- Standard margins are 1 inch on all four sides. No smaller than 1/2 inch
- 11 or 12 pt. font in an easy-to-read style (Times New Roman or any Serif font is best)
- Left justified, single-spaced
- Each section includes information in reverse chronological order
- Be consistent throughout the entire document regarding font and formatting
- Don't use abbreviations, spell everything out
- If you included courses taken, the actual course number isn't necessary, just the course title
- Avoid complex formatting- no tables, columns, pictures, etc.

ORGANIZATION

Your CV should highlight how you best fit the school and program you are applying for, and to do so, the content should be arranged to emphasize your relevant achievements. For example, if you are hoping for a research position, then organize your CV with your Research section near the top.

After the first draft is written, chances are you will want to reorganize the sections. If you have a section that looks sparse, consider combining it with another category and then just rename the section. For example, some people will have an Honors section and an Activities section. But when you do not have a lot of Honors, just make one Honors & Activities section, and combine the content.

Elle Phant

ephant@rose-hulman.edu ♦ (111) 222-3333 ♦ Somewhere, CA 90210

Qualifications

- Advanced analytical and technical writing, including validation documentation and grant writing procedures
- Extensive experience with statistical analysis of data and experimental design
- High-level proficiency with laboratory techniques and certified in sterile working practices
- Comprehensive knowledge in using computer programs such as MATLAB and AutoCAD
- Aptitude for developing and testing new clinical equipment

Education

Bachelor of Science, Biomedical Engineering (ABET Accredited)

May, 2024

Rose-Hulman Institute of Technology, Terre Haute, IN

GPA: 3.84

Concentration in Biomaterials

4-year Merit Scholar

"Undergraduate research thesis: "Noninvasive Evaluation of a Pig Bladder Wall's Mechanical Properties

Relevant Coursework

Genetic Engineering	Biomaterials	Mathematical Methods in Biomedical Engineering
Genomics and Proteomics	Engineering Analysis	Molecular Analysis of Human Disease
Biomedical Measurements	Bioethics	Statics & Mechanics of Materials I, II
Intro to Tissue Engineering	Biomechanics	Experimental Methods in Biomaterial Research
Tissue-Biomaterial Interactions	Biomedical Eng. Lab	Biomedical Engineering Design, I, II, III

Research Experience

Changes in Mechanical Property and Morphology of Thin-film Poly During Degredation in Aqueous Environments

- Determined how the changes in mechanical properties of PGLA polymer is correlated with the degredation process in order to elucidate the mechanism and provide guidance on use of PLGA in biological applications
- Developed protocol for spin-casting uniform PGLA thin films and a variety of known solvents were evaluated for impact on the quality of the films produced
- Quantified film thicknesses using a reflectometer and determined elastic moduli using a wavelength technique

Principles Governing Filtration Systems and Processes

- Conducted more than a dozen experiements with micro and ultra-filtration membranes
- Determined methods for improving overall filtration throughputs by exploring the effect of mixing and shear

Internship Experience

Downstream Process Engineer

Therapeutic Proteins, Chicago IL

Summer 2022

- Conducted small-scale UF/DF experiments intended for eventual scale-up of a therapeutic protein
- Executed validation procedures for process equipment to verify compliance with cGMP regulations
- Developed batch records for the downstream purification of the GCSF protein

Quality Assurance Associate

MPW Industrial Services, Biloxi, MS

Summer 2021

- Developed technical specifications for procurement of a Water Injection System
- Created validation documentation which was used to apply for a U.S. patent

Electrical Engineering Intern

Greeley and Hansen, Phoenix, AZ

Summer 2020

- Performed markups, piping calculations, lighting schedules, cost estimates, drawing assemblies, and equipment checks on electrical plans for water treatment and wastewater management plants
- Authored an energy efficiency analysis study which explored various ways to increase customer paybacks through innovative and green technologies

Laboratory Experience

Aseptic Techniques	Gel Elecrophoresis	Pierce BCA Protein Assay
PCR Genotyping	Restriction Mapping	Mechanical Testing Techniques
Electrical Systems	Thin-film Polymer Casting	Flourescence Microscopy
Cell Culture	Light and Phase Contrast	Microscopy Mechatronics
Animal Studies	Separations Technologies	Protein Encapsulation

Academic Projects

Assistive Device for Spinal Cerebellum Ataxia Patients

2021-2022

- Designed and developed device which improved the grip strength and fine motor skills of a woman with a degenerative muscular-neurological disorder
- Collaborated with two other students and successfully tested the device and presented it to the client

Split-Hook Prosthetic Hand Device

2019-2020

Developed a low-cost, easy to maintain, durable prosthetic for use in developing countries within Asia

Replacement Anterior Cruciate Ligament (ACL)

2020

- Worked within a team of three to develop a replacement ACL using porcine bladder
- Designed a prototype by braiding ECM strands and painting it with polydimethylsiloxane to increase strength
- Replacemt ACL withstood 200 psi in tension before beginning to rupture, determined through a load cell for tensile testing and Testview Lab Software for analysis

Efficacy of Proactive Biphasic Drug Therapies

2020

- Developed a protocol to determine the combined and long term effects of antifungal drugs on C. albicans biofilm prevention in vivo
- Justified sample sizes using priori statistical analysis and completed sample IACUC forms
- Drafted an NSF Grant proposal and received funding to further test the drug therapies

Teaching Experience

Teaching Assistant Problem Solving Biological Science & Biomedical Engineering 2021

• Assisted students with biological problem solving using MATLAB software

Teaching Assistant

Graphical Communications

2020

Guided students using SolidEdge 3D modeling software and how to effectively communicate graphical information

Software Proficiency

MATLAB/Simulink	AutoCAD	LoggerPro	TestView Lab Software
SolidEdge	Minitab/Maple	PSpice	Qualisys Track Manager

Publications & Presentations

Rocky Mountain Bioengineering Symposium

2022

- Presented research on changes in thin-film poly during degredation, received 3rd Place
- Research was published in the RMB Journal

Micoro and Ultra-Filtration Membranes

2011

- Presented findings at three conferences: Illinois WaterWorks Association, Junior Science and Humanities Symposium and IRCBC Rose-Hulman Undergraduate Rresearch Symposium
- Winner of Rose-Hulman's Research & Analysis Essay Competition

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Key Points for Crafting a Personal Statement

A strong personal statement should...

- · Show how your personal experiences, academic achievements, and professional goals intersect and shape your aspirations
- Detail specific experiences that have developed your character, work-ethic, and unique perspective
- Explain why your background suits you for the program and how you offer a unique perspective to the community
- Adhere to each program's requirements for length, content, and structure
- Have it reviewed by multiple people inside and outside your field and revise it until it is perfect

Questions to ask yourself before you write:

- What makes you special, unique, or impressive?
- What personal or family details, problems, or influential events shape who you are and your goals?
- When did you become interested in this field? What have you learned that strengthens your interest and proves you're suited for it? What insights have you gained?
- How have you explored this field through classes, readings, seminars, work, or conversations with professionals?
- If you've worked a lot during college, what skills have you gained (e.g., leadership or managerial skills) and how has this work contributed to your growth?
- What are your career goals?
- Are there gaps or discrepancies in your academic record that need explanation (e.g., strong grades but average test scores, or an upward GPA trend)?
- Have you overcome any unusual obstacles or hardships (e.g., economic, familial, or physical)?
- What personal qualities (e.g., integrity, compassion, persistence) do you possess that will help you succeed in this field? How can you demonstrate these traits?
- What skills do you have (e.g., leadership, communication, analytical)?
- Why would you be a stronger candidate for graduate school and more successful in your profession than other applicants?
- What sets you apart from other candidates?

General advice

Answer the Questions For multiple applications, tailor your responses to each school's specific questions. Don't reuse the same statement; ensure each answer fits the question asked.

Tell a Story Use concrete experiences to illustrate your points. Keep your statement fresh, engaging, and unique to stand out and be memorable.

Be Specific Support your claims, like wanting to be a doctor, with specific reasons and experiences. Your application should logically reflect your story.

Find an Angle Make your story interesting by finding a unique angle or "hook" to captivate the reader.

Focus on the Opening Paragraph Your opening paragraph is crucial for grabbing attention and setting the tone for the rest of your statement.

Demonstrate Your Knowledge Detail your interest and experience in the field using specific examples and professional language. Highlight relevant work, research, classes, and conversations.

Avoid Certain Topics Omit high school achievements and controversial subjects like politics or religion.

Do Your Research If asked why you're applying to a particular school, research what makes it unique and mention relevant factors like geographical or cultural factors.

Write Clearly and Correctly Be thorough with typing and proofreading. Good writing and correct language use are vital. Be clear, concise, and adhere to word limits.

Avoid Clichés Avoid overused statements like wanting to help people because you're good at science. Be original.

SAMPLE PERSONAL STATEMENTS

Brief STEM Personal Statement

My passion for science began in high school, where I excelled in physics, chemistry, and math. As a senior, I took an advanced Electrical Circuits course at a local college and earned an A, which confirmed my decision to pursue electrical engineering.

During my undergraduate studies, I explored a wide range of engineering courses, reinforcing my strong interest in the field. Additionally, I enjoyed and gained new perspectives from studying various humanities subjects.

I developed a keen interest in laser technology and am currently taking a graduate course in quantum electronics, where I am the only undergraduate among 25 students. Another area of interest is electromagnetics. Last summer, as a technical assistant at a renowned lab, I learned about practical applications in microstrip and antenna design. My work impressed the management enough to invite me back after graduation.

After completing my undergraduate studies, I plan to pursue a master's degree in electrical engineering, followed by a Ph.D. My goal is to work in research and development within private industry, where I can apply my theoretical knowledge and creativity.

I am impressed by the excellent reputation of your school, reinforced by conversations with your alumni. Your outstanding faculty and state-of-the-art computer facilities make me eager to continue my studies at your esteemed institution.

Sample Personal Statement UCLA School of Public Health Degree Objective: MPH

I aspire to be a leader in epidemiology. I've worked towards this by co-authoring an epidemiology course manual with Dr. David R. Black, publishing articles for various audiences, and completing advanced coursework in epidemiology, statistics, and biology. My graduate school goals include collaborating with UCLA faculty on research projects, publishing in professional journals and public media, and producing classroom resources for epidemiology education.

With Dr. Black, I co-authored a course manual used by over 50 students at Purdue University-West Lafayette. The manual includes 650+ PowerPoint slides and materials covering key epidemiology concepts like morbidity, mortality, screening tests, study designs, and causation. We plan to publish this manual to provide students with a valuable resource and offer faculty a comprehensive lecture series. Sample excerpts are attached to my application.

Writing is a crucial tool for disease prevention and control. I've published articles in the AMWA Journal and created the medical writing resource for the Purdue University Online Writing Lab. At UCLA, I aim to collaborate with the Office of Media Relations to publish articles on disease prevention and healthy living. I also hope to assist faculty in writing articles for professional journals and NIH grant proposals, using my training in medical journalism and grant writing.

Epidemiology research enhances our understanding of people and their environments, leading to better disease prevention methods. I wish to research infectious disease epidemiology under Dr. Scott P. Layne. My preparation includes lab work and graduate-level study of pathogens like Mycobacterium tuberculosis, Bacillus anthracis, Bordetella pertussis, Vibrio cholerae, HIV, Escherichia coli O157, and Avian H5N1 Influenza. In spring 2009, I will pursue graduate coursework in immunology, molecular biology, and genetics. I plan to apply this knowledge to develop strategies against bioterrorism, focusing on pathogen evolution and virulence.

My second research interest lies in monitoring pathogens in human populations. Dr. Layne's article, "Human Influenza Surveillance: The Demand to Expand," inspired me. His work on high throughput laboratory networks for faster vaccine delivery and monitoring epidemic strains has significant implications for public health. Working with Dr. Layne would expand my knowledge of medically relevant pathogens and contribute to improving global health.

I am applying to UCLA's MPH program in epidemiology. My experience in epidemiology, academic background, and personal qualities have prepared me well for your program. I aim to combine rigorous academic study with hands-on experience, and I believe UCLA and Los Angeles provide exceptional opportunities for this.

I am eager to contribute to your program through research, publishing, and multidisciplinary collaboration. My goal is to leverage UCLA's intellectual richness and diversity to improve global quality of life.

Guidelines for Writing a Statement of Purpose

A strong statement of purpose should...

- Highlight your focused research interests in a specific field.
- Describe how your academic and professional experiences have shaped these interests and prepared you for advanced study.
- Articulate how these research interests align with the offerings and opportunities of the institution and program you are applying to.

Tips for writing an effective statement of purpose:

- Ensure you spend at least a paragraph detailing your interest in the specific program to which you are
 applying. Highlight specific professors whose work aligns with your academic experience or research
 interests and explain this connection. Discuss specific institutions, programs, and opportunities
 associated with the program, and describe how you intend to leverage them for your academic and
 professional growth.
- Be specific about your research interests, identifying a particular field within the department and
 professors who specialize in that area. While you don't need to have your dissertation topic planned out,
 showing a clear direction in your interests is crucial. Admissions decisions often prioritize diversity in
 specialties, so narrowing your focus can be pivotal.
- Anecdotes and autobiography can be powerful in your introduction but ensure that the majority of your statement is technical and academic. Only include extracurricular activities if they directly pertain to your research interests. While your personal history likely influences your research interests, avoid making your statement sound generic or uninspired. Your primary goal is to demonstrate to the committee that you are capable of excelling in coursework, performing well in the lab, completing a dissertation, or effectively teaching undergraduate classes.

Professionally, statements of purpose answer the following questions for the committee.

First: what work are you interested in doing in graduate school?

Be specific in your focus; avoid the mistake of thinking that being vague will appeal to a broader audience. For example, if your primary interest is studying business ethics with specific faculty members, state that clearly in your statement. Listing multiple other interests without detail will only make your statement unfocused and disjointed, rather than showcasing your specific goals effectively.

Second: why is the program you are applying to a good fit for you?

Your research into each program is crucial. Specify why the program you're applying to is your top choice. Avoid generic praise like "one of the best in the country." Focus on what makes it exceptional for your research. For instance, if it offers a favorable instructor-to-student ratio, explain how this will benefit you. If it stands out for its hands-on field training, detail how you plan to capitalize on this opportunity. Discuss your post-graduate goals. Where do you envision yourself? Highlight the program's track record in supporting students like you. While you don't need to be entirely certain about your future plans, demonstrate your commitment to graduate school and articulate what you hope to achieve through your dedication.

Personally, statements of purpose answer two questions for the committee.

First: What matters to you the most, and why?

The statement of purpose is your opportunity to add meaning to the information the committee receives about you. Avoid simply reiterating your CV or resume, as this won't convey the significance of your experiences. For example, a brief job or class might have sparked your decision to pursue graduate school due to a unique experience you had there. Your statement should provide the committee with a deeper understanding of who you are and how you have personally interpreted the events that have shaped your life.

Second: What sets you apart from other candidates?

Most importantly, avoid using bland language. It can be tempting to play it safe and avoid standing out in your statement for fear of sounding unconventional. Ironically, sharing unique aspects of yourself may make you a more compelling candidate. Graduate program committees review numerous applications annually. Differentiate yourself by demonstrating your professionalism while also revealing the personal motivations behind your significant decisions. What human element drove you to reach your current position?

SAMPLE STATEMENTS OF PURPOSE

Building Spaceships (Aeronautics and Astronautics)

I still vividly recall the first space vehicle I designed. In sixth grade at Elm Street Elementary School, Mrs. Jones challenged our class to envision our own versions of the space shuttle. I sketched mine with ice trays beneath the rocket engines to prevent overheating. Since then, my passion for spacecraft design has only deepened, leading me to pursue a PhD in Aeronautics and Astronautics at Massachusetts Institute of Technology to turn this childhood dream into reality. During graduate school, my focus will be on space propulsion research. Professor Smith's work on measuring electron density in steady-state plasmas particularly intrigues me, and I aspire to collaborate with her at MIT. My ongoing Fulbright project on studying Laser-Induced Fluorescence of Xenon plasmas to determine nuclear cross sections has equipped me with invaluable skills for future research endeavors. My Applied Physics major at Purdue University has provided a robust foundation, encompassing courses such as Modern Physics, Thermal Physics, Circuits and Electronics I and II, alongside advanced mathematics including Partial Differential Equations. My fascination with pushing the boundaries of human exploration drives my commitment to integrating research with education. In my Industrial Physics class, I eagerly undertook the challenge of building a magnetic levitation train model, starting as a class project and evolving into my senior thesis. This experience has underscored my passion for research and deepened my scientific knowledge through hands-on application.

From childhood, space has captivated my imagination, fueling my dedication to advancing space exploration and understanding. I am eager to pursue a PhD in Aeronautics and Astronautics at MIT to specialize in electric space propulsion and contribute to the further exploration of space science.

Shoe Boxes & Aquariums (Biology)

Growing up in southwestern Oregon, I had the Cascade and Siskiyou mountains and the Pacific Ocean as my playgrounds, which fostered my deep love for the outdoors. From a young age, I collected organisms of all kinds—whether they walked, crawled, slithered, chirped, hopped, swam, or were potentially hazardous. This passion for nature, combined with a curiosity for biological systems, drew me to pursue a degree in biology, with a particular focus on marine biology. The ocean, with its vibrant colors and diverse array of creatures, has always captivated me. Throughout my academic journey, a diverse foundation of classes has equipped me with the necessary tools to explore and comprehend biology deeply. This education has solidified my desire to pursue a career in biology, with the aspiration of enhancing my research skills through a Master of Science degree.

At Stanford University, I am eager to delve into comparative physiology, molecular biology, ecology, and evolution, particularly focusing on aquatic organisms. My specific interest lies in understanding how the physiology of aquatic organisms influences their ecology and interactions within ecosystems. Dr. Clay's research on freshwater clam populations at Turnbull National Wildlife Refuge and in the Coeur d'Alene watershed aligns closely with my research goals. I am particularly excited about the opportunity to engage in fieldwork documenting clam distributions and conducting transplant experiments, coupled with laboratory work such as tissue processing and biochemical assays under her guidance. Additionally, I look forward to collaborating with Drs. Reid and Lee to expand my expertise in aquatic biology.

Earning a Master of Science degree with a focus on integrating field and lab skills will prepare me for future research with aquatic animals and potentially lead me into marine biology. While I have broad interests within biology, pursuing a master's degree will provide me with versatile career opportunities. Ultimately, I envision myself contributing to organizations like the National Oceanic and Atmospheric Administration (NOAA) or the U.S. Environmental Protection Agency (EPA) or working in an aquarium. Looking further ahead, obtaining a doctoral degree and becoming an academic scientist at a university is also a long-term aspiration. My overarching goal is to leverage my passion for the outdoors to contribute to preserving our natural world for future generations.