

UPOP Career Compass



UPOP's Career Compass is designed to help you understand, build, and talk about the skills that matter most as you seek internships, research positions, and other professional experiences – during your time at MIT and beyond. It provides a clear framework for recognizing skills as you develop them, and seeing how they connect to your career goals. It helps you identify the value of what you are already doing in classes, student organizations, research positions, clubs, and co-curricular programs, while also showing you where you can continue to grow. Career Compass gives you a shared language for reflecting on your experiences, setting goals, and communicating your strengths in resumes, interviews, networking conversations, and future applications.

As you move through the UPOP year, you are not only developing key skills to help you find and acquire professional experiences – like job searching, writing resumes and cover letters, interviewing, and networking—you are also developing the broader competencies that will help you contribute and succeed in professional settings. These are the skills that employers are looking for in addition to the technical knowledge you're acquiring at MIT – skills like communication, teamwork, and problem solving.

This guide introduces each UPOP Career Compass competency; explains what it means; highlights ways you can develop your skills through both UPOP and everyday MIT experiences; and demonstrates how best to communicate about your competencies in a professional context. Think of it as a roadmap for your professional growth—one that can help you better understand your strengths, develop new ones, and move forward with greater confidence, clarity, and direction.

How to Use This Document

This resource outlines the six UPOP career readiness competencies and provides tools to help students recognize, develop, and articulate them. Each competency section follows the same structure:

Definition — A concise statement of what the competency means in professional contexts.

Sample Behaviors — Specific actions and mindsets that demonstrate this competency in practice. Use these to recognize when and how you are already building this skill. This is not an exhaustive list.

How Employers Ask — Common interview questions employers use to assess this competency. Use these to anticipate what employers are listening for and to prepare your own examples in advance.

How To Talk About It On Your Resume — Examples showing how to translate real experiences into clear, results-oriented language on your resume. Each example is labeled with an organization and role so you can see exactly what this looks like in context. Note the use of strong action verbs, specific numbers, and outcomes.

Career & Self-Development

Definition: Proactively develop oneself and one's career through continual personal and professional learning, awareness of one's strengths and weaknesses, navigation of career opportunities, and networking to build relationships within and beyond one's organization.

Sample Behaviors:

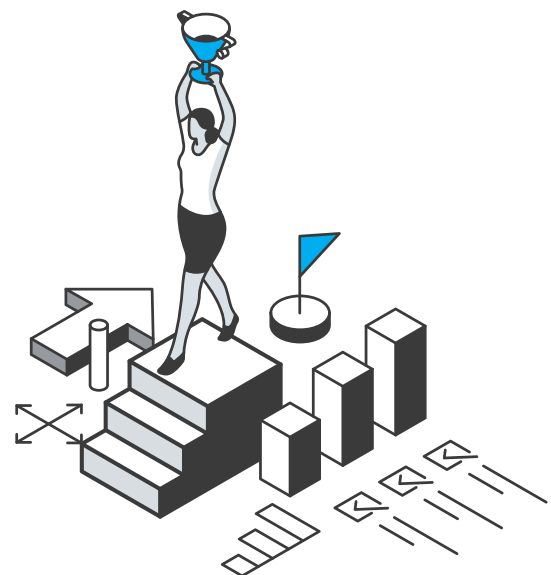
- Develop an awareness of one's own strengths and areas for development.
- Identify areas for continual growth while pursuing and applying feedback from supervisors and colleagues.
- Develop plans and goals for one's future career.
- Assume roles or responsibilities that contribute to professional growth and align with career development goals.
- Establish, maintain, and/or leverage relationships with people who can help one professionally (including classmates, faculty, and professionals).
- Reflect on setbacks and use them as opportunities for growth and improvement.
- Quickly adapt to change and be open to learning new technologies to support career and professional growth.

How Employers Ask:

- Tell me about a time when you received critical feedback. How did you respond?
- Describe a moment when you realized you needed to develop a new skill. What did you do?
- How do you stay current with trends and changes in your field?
- Can you walk me through your career goals and how your current experiences align with them?
- Tell me about a professional setback and what you learned from it.
- How do you identify gaps in your own knowledge or abilities?
- What do you consider your greatest strength, and what is an area you are actively working to develop?

How To Talk About It On Your Resume:

- **[Name of Research Lab], Undergraduate Researcher:** Revised experimental protocol based on PI feedback, improving data collection efficiency and contributing to lab's ongoing research objectives.
- **Next House, Resident Peer Mentor:** Organized and executed four floor programs for 25 residents while managing competing priorities, receiving positive resident feedback on programming quality and accessibility.
- **Undergraduate Advising Center, Associate Advisor:** Conducted biweekly 1:1 meetings with 8 mentees, provided guidance on course selection and academic planning, and maintained 90% mentee attendance and engagement.
- **Thermodynamics Class, Teaching Assistant:** Held weekly office hours, responded to student questions via email within 24 hours, and supported 30 students through challenging course material.
- **MIT Rocket Team, Propulsion Sub-team Member:** Took on new technical responsibility within club, sought feedback from team lead on performance, and applied lessons learned to improve next design iteration.



Communication

Definition: Clearly and effectively exchange information, ideas, facts, and perspectives with persons inside and outside of an organization.

Sample Behaviors:

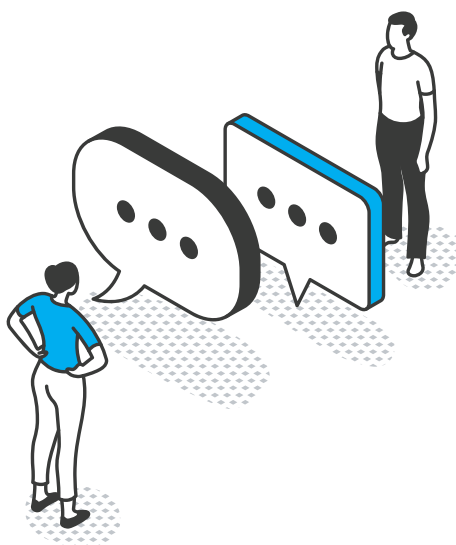
- Understand the importance of and demonstrate verbal, written, and non-verbal/body language.
- Employ active listening, persuasion, and influencing skills.
- Communicate in a clear and organized manner so that others can effectively understand
- Frame communication with respect to range of learning styles, varied individual communication abilities, and cultural differences.
- Seek specific information from supervisors, colleagues, and stakeholders through targeted questions to accomplish tasks effectively.

How Employers Ask:

- Describe a time when you had to explain a complex concept to someone unfamiliar with your field.
- How do you adapt your communication style when working with different audiences (students, faculty, community members, funders)?
- Tell me about a time when you had to influence or persuade others. How did you approach it?
- How do you ensure clarity and reduce misunderstandings in written communication?
- Describe a situation where you had to deliver difficult feedback constructively.

How To Talk About It On Your Resume:

- **[Name of Research Lab], Undergraduate Researcher:** Presented research findings to 12-person lab group of mixed expertise levels, translating technical methodology into accessible language that engaged both specialists and students new to the field.
- **Physics II, Teaching Assistant:** Led weekly recitation sections for 25 students, explained complex problem-solving approaches through multiple methods, and received positive feedback on clarity and engagement.
- **McCormick Hall, Resident Peer Mentor:** Conducted weekly floor meetings with 25 residents, actively listened to housing and community concerns, and escalated key issues to residential management with specific recommendations.
- **MIT Energy Club, Treasurer:** Drafted funding request email to campus finance office with clear project description, budget justification, and specific funding amount; received approval within one week.
- **MIT Solar Electric Vehicle Team, Mechanical Sub-team Member:** Presented design decisions to eight-person engineering sub-team using both technical details and visual aids, adapting explanations based on team members' engineering backgrounds and concerns.



Critical Thinking & Problem-Solving

Definition: Identify and respond to needs based upon an understanding of situational context and logical analysis of relevant information.

Sample Behaviors:

- Make decisions and solve problems using sound, comprehensive reasoning and judgment.
- Gather, analyze, and organize information from multiple sources and individuals to fully understand a problem.
- Anticipate situational needs and requirements to establish and prioritize action steps.
- Effectively communicate choices and rationale, recognizing the range of perspectives and lived experiences of stakeholders
- Plan, initiate, and manage projects to ensure timely completion and effective execution within project parameters.

How Employers Ask:

- Walk me through how you approached solving a complex problem in your work or studies. What information did you gather?
- Tell me about a time when you had to make a decision with incomplete information. How did you proceed?
- Describe a situation where you had to balance competing priorities or stakeholder needs. How did you decide what to prioritize?
- Can you give me an example of when you anticipated a problem before it occurred and took preventive action?
- How do you evaluate whether a solution was effective? What metrics or feedback do you use?
- Tell me about a time when your initial approach to a problem didn't work. How did you pivot?

How To Talk About It On Your Resume:

- **[Name of Research Lab], Undergraduate Researcher:** Debugged failing experiment by reviewing previous trial data and consulting lab mentor; identified calibration error, redesigned test protocol, and resumed data collection on schedule.
- **Baker House, Resident Peer Mentor:** Identified root cause of low attendance at floor programs by surveying residents; discovered scheduling conflict with popular campus event and adjusted programming timeline, increasing attendance by 35%.
- **D-Lab, Project Team Member:** Managed real-time troubleshooting during project implementation when initial technology solution failed, rapidly gathered input from 5 stakeholders, evaluated 2 alternative approaches, and pivoted to backup solution without derailing project timeline.
- **Undergraduate Association Finance Board, Committee Member:** Evaluated 5 competing funding requests from clubs, assessed project feasibility and member benefit, and recommended allocation that balanced innovation with resource constraints.
- **ChemE Cube Team, Design Engineer:** Troubleshot design challenge on current project by consulting 2 senior club members and reviewing past competition results; evaluated 2 design approaches and recommended solution that reduced weight by 8% while maintaining performance.



Leadership

Definition: Recognize and capitalize on personal and team strengths to achieve goals.

Sample Behaviors:

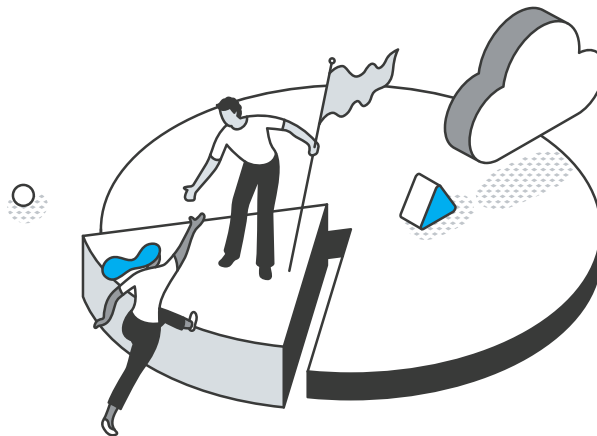
- Inspire, persuade, and motivate self and others under a shared vision, even when not holding formal authority.
- Actively seek input from various stakeholders to guide decisions and influence team direction.
- Serve as a role model to others by approaching tasks with confidence and a positive attitude.
- Professionally advocate for oneself and others.

How Employers Ask:

- Tell me about a time when you took the lead on a team project.
- How have you served as a role model for your peers in a non-leadership role?
- Tell me about a time when you were able to use persuasion to successfully convince someone to see something your way.
- Share an example of when you had to delegate tasks within your team to optimize efficiency and productivity.
- Describe a situation where you used your leadership skills to motivate your team or colleagues.
- Tell me about a time when you took the initiative in your education or career. What was your motivation for doing so?

How To Talk About It On Your Resume:

- **MIT Outing Club, Events Committee Chair:** Led five-member student organization committee to plan and execute six campus events in one semester, managing logistics, budgets, and outreach for 150+ attendees.
- **Undergraduate Advising Center, Associate Advisor:** Mentored eight first-year students as an Associate Advisor, organizing biweekly check-ins, connecting students with academic resources, and supporting their transition to MIT.
- **MIT Cross Country, Varsity Athlete:** Coordinated with 20+ teammates as a varsity athlete, helping lead practices, reinforce team accountability, and contribute to season record improvement.
- **Gordon Engineering Leadership Program, Team Lead:** Completed Gordon Engineering Leadership program; led four-person team through a semester-long challenge, presenting recommendations to faculty and incorporating feedback to strengthen final deliverables.
- **MIT Solar Electric Vehicle Team, Mechanical Sub-team Lead:** Managed mechanical engineering sub team of six people for solar electric vehicle club, organizing workflows, troubleshooting design challenges, and driving progress toward key build milestones.
- **[Company Name], Software Engineering Intern:** Directed implementation of backend tool during a software engineering internship, working across engineering and product teams to streamline internal workflows and cut manual processing time by 30%.



Professionalism

Definition: Understand and demonstrate effective work habits, and act in the interest of the larger community and workplace.

Sample Behaviors:

- Be accountable to self, others, and the organization.
- Maintain a positive personal brand in alignment with personal career values.
- Be present and prepared.
- Demonstrate dependability (e.g., report consistently for work or meetings).
- Prioritize and complete tasks to accomplish work goals.
- Focus on accuracy and completeness with attention to detail to ensure high-quality work.
- Demonstrate flexibility by adapting to various environments.
- Understand workplace norms and practices.

How Employers Ask:

- Tell me about a time when you set a goal and were able to achieve it.
- Describe a time when you had to conform to a policy with which you did not agree.
- Can you tell me about a time when you managed multiple tasks at once?
- How do you handle situations when you disagree with a team member's approach or decision?
- Tell me about a time you made a mistake at work. How did you resolve the problem, and what did you learn from your mistake?
- Describe an occasion when you had to manage your time to complete a task. How did you do it?

How To Talk About It On Your Resume:

- **[Name of Research Lab], Undergraduate Researcher:** Conducted research in a faculty lab, consistently meeting weekly deadlines, maintaining accurate experimental records, and delivering reliable results to support ongoing team projects.
- **Department of Chemistry, Teaching Assistant:** Served as Teaching Assistant for undergraduate course, arriving prepared for weekly sessions, responding promptly to student questions, and grading assignments accurately to support high-quality learning experience.
- **[Sorority/Fraternity Name], Risk Manager:** Held leadership role in my sorority, managing responsibilities consistently, responding to community concerns professionally, and helping uphold house standards and expectations.
- **[Company Name], Quantitative Trading Intern:** Maintained a high standard of accuracy and accountability as a quant trading intern, validating datasets and models before use and ensuring time-sensitive work was completed reliably in support of daily trading decisions.
- **[Company Name], Sustainability Intern:** Demonstrated professionalism in an international start-up environment by adapting quickly to a new workplace culture, communicating effectively with cross-cultural team members, and adjusting to evolving project needs in support of sustainability initiatives.



Teamwork

Definition: Build and maintain collaborative and trusting relationships to work effectively toward common goals, while appreciating varied viewpoints and shared responsibilities.

Sample Behaviors:

- ▶ Listen carefully to others, taking time to understand and ask appropriate questions without interrupting.
- ▶ Effectively manage conflict, interact with and respect individual personalities, and be open to ambiguity.
- ▶ Be accountable for individual and team responsibilities and deliverables.
- ▶ Employ personal strengths, knowledge, and talents to complement those of others.
- ▶ Exercise the ability to compromise and be agile.
- ▶ Collaborate with others to achieve common goals.
- ▶ Build strong, positive working relationships with supervisors and team members/coworkers.
- ▶ Keep an open mind to varied ideas and new ways of thinking.

How Employers Ask:

- ▶ Tell me about a time when you worked on a successful team project. What was your role on the team and how did you contribute to the team's success?
- ▶ How do you ensure that all team members have the opportunity to contribute their ideas and perspectives during team discussions or meetings?
- ▶ Share a time when you had to provide support or assistance to a team member who was facing challenges.
- ▶ How do you ensure effective communication and information sharing within your team to avoid misunderstandings or misalignments?
- ▶ How do you handle situations when a team member is not pulling their weight or contributing to the team's efforts?

How To Talk About It On Your Resume:

- ▶ **Software Construction Class, Student:** Partnered with four-person team to complete semester-long software engineering project, delivering high-quality product on schedule and within budget constraints.
- ▶ **HackMIT, Team Lead:** Led five-member team during hackathon, coordinating project strategy and development efforts to earn second place among competing teams.
- ▶ **[Name of Research Lab], Undergraduate Researcher:** Coordinated weekly research team meetings, aligning members on project milestones, tracking progress, and keeping the project on schedule.
- ▶ **PKG Center, Community Engagement Volunteer:** Worked with student volunteer team to provide free tutoring to 50+ underprivileged children, contributing to improved academic performance and ongoing community engagement.
- ▶ **Random Hall, Resident Peer Mentor:** Developed initiatives with five Resident Assistant colleagues to improve the residential and working environments for students.
- ▶ **[Company Name], Analyst Intern:** Collaborated with four-person analyst team to evaluate client operations, analyze 10,000+ rows of data, and develop recommendations that identified three cost-saving opportunities worth an estimated \$200K annually.



Where To Build Your Competencies

Listed below are UPOP's regular campus partners offering excellent opportunities for MIT students to develop their career readiness competencies. This is far from an exhaustive list, you can build these skills on and off campus, in your classes, your residence hall, your clubs, and your research positions and internships. As you explore the list, think about what you are already doing and what skills you may already be building there, even if it isn't listed here.

Campus Partners:

► Technical Leadership & Communication Programs:

- Undergraduate Practice Opportunities Program (UPOP)
- Gordon Engineering Leadership Program (GEL)
- MIT Communication Lab
- Career Advising & Professional Development (CAPD) workshops
- D-Lab
- Division of Student Life, resident peer mentoring
- Edgerton Center, which includes engineering clubs and teams, campus-wide maker spaces, and work opportunities to provide training and maker space support

► First Year Learning Communities:

- Concourse
- DesignPlus
- Terrascope
- Experimental Study Group (ESG)
- Martin Trust Center for MIT Entrepreneurship
- MISTI Global Teaching Labs (GTL) and summer placements
- New Engineering Education Transformation (NEET)
- Priscilla King Gray Center for Social Impact (PKG) — microinternships, IAP and summer internships
- Undergraduate Advising Center (UAC) — Associate Advisors
- Undergraduate Research Opportunities Program (UROP)

Other Ways to Build Skills On and Off Campus:

Over 500 student groups provide skill-building and leadership opportunities, along with community building. The full list of opportunities can be found at engage.mit.edu, and fall into several categories:

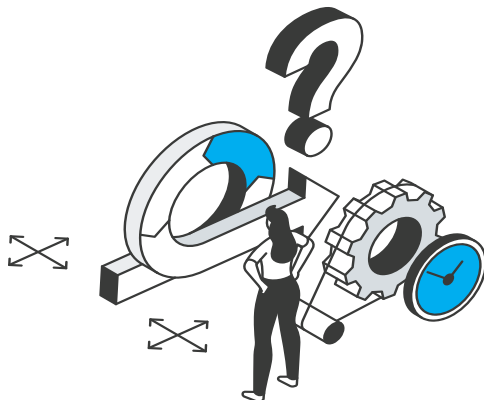
- Association of Student Activities (ASA) groups
- Residential Life
- Fraternities, Sororities, and Independent Living Groups (FSILGs)
- Club and Intramural sports
- Non-ASA Student Organizations

Work Experiences:

- Internships, non-MIT research positions, public or NGO volunteer experiences
- On-campus academic support such as teaching assistant positions and tutoring
- On-campus work, such as campus tour guides and positions in libraries, athletic facilities, and dining halls

Academic and Extra-Curricular Experiences:

- MIT Athletics, including varsity sports teams
- In class, such as team projects (e.g. 10.27, 2.007, 2.009) and presentations and recitations
- Conference and poster session presentations
- Hackathons and design competitions



For more information:

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