

CoSE: Geosciences and Engineering Career Readiness Skills

Employers look for the skills listed below when hiring new graduates. Use the descriptions as a reference to select which skills you feel you have developed. Meet with your academic advisor and faculty mentor to discuss which classes to take and other opportunities to strengthen areas where you are missing or need more experience.

Adaptability:

Develop the ability to adjust one's behavior, mindset, and approach in response to changing circumstances while maintaining productivity and effectiveness.

- Adjust design plans, field methods, or project timelines when requirements or conditions change.
- Learn new engineering tools, simulation software, or field equipment.
- Stay calm and focused when technical problems or field conditions create setbacks.

Career & Self-Development:

Advance your career through continuous learning, self-awareness, exploring opportunities, and networking.

- Explore careers in design, manufacturing, infrastructure, energy, geoscience, or graduate study.
- Identify strengths in problem solving, technical design, fieldwork, or collaboration.
- Use internships, field experiences, co-ops, or design teams to test interests.

Communication:

Clearly and effectively exchange information, ideas, facts, and perspectives with people inside and outside an organization.

- Communicate design ideas, technical findings, or project updates clearly and professionally.
- Listen actively to team members, clients, supervisors, or stakeholders.
- Ask questions to clarify project requirements, constraints, or field conditions.

Critical Thinking:

Identify and respond to needs based on an understanding of situational context and a logical analysis of relevant information.

- Analyze data, design options, field information, or project constraints from multiple sources.
- Evaluate evidence before selecting a design, method, or solution.
- Design, test, and refine solutions using feedback and results.

Leadership:

Recognize and use personal and team strengths to achieve shared goals and support positive outcomes.

- Take initiative to improve design work, field projects, or team outcomes.
- Support and motivate others through trust, accountability, and clear direction.
- Plan and manage tasks, schedules, or deliverables from start to finish.

Professionalism:

Exhibit strong work habits, adapt to different organizational environments, and act in the best interest of the workplace and community.

- Meet deadlines, follow through on commitments, and manage responsibilities reliably.
- Act with integrity and ethical judgment in labs, design projects, fieldwork, and internships.
- Adapt to different workplace, site, or project expectations.

Teamwork:

Build and maintain collaborative relationships to work effectively toward common goals while appreciating diverse viewpoints and shared responsibilities.

- Collaborate effectively with design teams, lab groups, or field crews.
- Take responsibility for assigned tasks and contribute to shared goals.
- Address conflict constructively to maintain progress and working relationships.

Technology:

Understand and leverage technologies ethically to enhance efficiencies, complete tasks, and accomplish goals.

- Use digital tools to communicate, create, design, and analyze data.
- Evaluate digital information to complete tasks and inform decisions.
- Apply digital tools to improve efficiency and solve problems.