

CoSE: Biological Sciences and Chemistry 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 lab procedures, research plans, or experimental approaches when results or conditions change.
- Learn new instruments, techniques, or software used in laboratory work.
- Stay calm and productive when experiments do not go as expected.

Career & Self-Development:

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

- Explore careers in healthcare, research, biotechnology, environmental science, or graduate study.
- Identify strengths in lab work, analysis, observation, or teamwork.
- Use laboratory, clinical, or research opportunities to test interests.

Communication:

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

- Explain lab results, procedures, and research findings clearly in writing and speaking.
- Listen actively to instructions, feedback, and questions from instructors or peers.
- Ask clarifying questions about methods, expectations, or data interpretation.

Critical Thinking:

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

- Analyze data and information from multiple sources to make informed decisions.
- Evaluate evidence before drawing conclusions from experiments or research.
- 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 lab work, research processes, or group projects.
- Support and motivate teammates through encouragement and accountability.
- Plan and manage tasks or projects 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, research, and academic settings.
- Adapt to different lab cultures, research expectations, or professional environments.

Teamwork:

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

- Collaborate effectively with lab partners, research teams, or classmates.
- Take responsibility for assigned tasks and contribute to shared goals.
- Address conflict constructively to keep work moving forward.

Technology:

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

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