

Engineering Co-operative Education: Work Term Expectations

SKILLS EXPECTATIONS FOR ENGINEERING WORK TERMS 1-6

When completing the Work Term Evaluation form, please rate the student based on the skills expectations for the work term that they are completing (as described below <u>for each work term</u>). The expectations increase with progression through the engineering education program. During more junior work terms (e.g., work terms 1 and 2), students should demonstrate these skills at a beginner level, working their way to demonstrating the skill at an intermediate level (e.g., during work terms 2 and 3), before demonstrating the skills at a more advanced level in senior work terms (e.g., work terms 4 through 6).

For example, the work term expectations for "Initiative" from the Work Term Evaluation form are show below for each work term, highlighting increasing expectation levels as a student progresses through the engineering program.

1. Initiative

Work Term 1	Under supervision, voluntarily take action to complete assigned tasks
Work Terms 2 and 3	Take independent action in completing assigned tasks, and show motivation in seeking new work
Work Terms 4	Without prompting, take immediate action in completing assigned tasks or projects, and show motivation in pursuing work beyond assigned tasks
Work Terms 5 and 6	Without prompting, take all appropriate and required action in completing assigned tasks or projects, and show motivation in pursuing work and additional responsibilities beyond assigned tasks

If a Work Term 1 student meets the expectation of "Under supervision, voluntarily take action to complete assigned tasks", the rating selected for this skill/quality would typically be "3-Competent" on the 1-5 point rating scale. Exceeding these expectations would result in a rating of "4-Strong" or "5-Outstanding" rating for that skill/quality. Conversely, if a Work Term 4 student does not meet the expectations of "Take immediate action in completing assigned tasks or projects, without prompting, and show motivation in pursuing work beyond assigned tasks", they may receive a "1-Not Developed" or "2-Developing" rating for that skill/quality.

Work Term 1 - Skills Expectations

- 1. Initiative: Under supervision, voluntarily take action to complete assigned tasks
- 2. Organization and Planning: Prioritize work assignments with supervision, and plan and use time productively to complete work
- 3. Quality of Work: With supervision, produce good quality work with minimal errors
- 4. Productivity: With supervisor guidance, learn new material to complete an assigned amount of work within set time limits
- 5. Written Communication: Communicate technical information in writing in an organized way, with some review and editing required
- 6. Verbal Communication: Verbally express ideas and technical information clearly, with minimal clarification required
- 7. Work Independently: Work independently on routine tasks, taking direction and seeking assistance for clarification and understanding in order to properly complete tasks
- 8. Teamwork: Work cooperatively with others in completing tasks, supporting team success
- 9. Problem Solving: Using standard step-by-step methods, apply problem solving skills to assigned work
- 10. Project Management Techniques: Develop awareness of project management techniques
- 11. Safety and Environment: Be aware of safety procedures and demonstrate safe work practices
- 12. Ethics and Integrity: Demonstrate awareness of ethical issues, and display honesty and fairness in interactions with others
- 13. Appreciation of Diversity: Recognize diversity and inclusion in the workplace; showing respectful behaviour towards others
- 14. Adaptation to Organization's Rules and Policies: With guidance, recognize, understand, and follow an organization's rules and policies
- 15. Response to Supervision: Openly accept direction and feedback and respond positively
- 16. Dependability: Be reliable and consistent in completing work and meeting commitments, while demonstrating a good work ethic

Work Term 2 - Skills Expectations

- 1. Initiative: Take independent action in completing assigned tasks, and show motivation in seeking new work
- 2. Organization and Planning: Prioritize work assignments based on their importance, and plan and use time efficiently and productively to complete work
- 3. Quality of Work: Produce good quality work with few errors, checking own work with minimal assistance
- 4. Productivity: Independently learn new material to consistently complete an assigned amount of work on time
- 5. Written Communication: Communicate ideas and information in writing clearly, concisely, and in an organized way, with some review and editing required
- 6. Verbal Communication: Verbally express ideas and information clearly, concisely, and in an organize way, with minimal clarification required; comfortable speaking to small group
- 7. Work Independently: Work independently on assigned tasks and projects, taking direction and seeking assistance as required
- 8. Teamwork: Be an effective team member by working collaboratively and cooperatively with others and assuming responsibility for tasks
- 9. Problem Solving: Contribute to engineering problem analysis and solution generation
- 10. Project Management Techniques: Demonstrate understanding of project management techniques and incorporate into work as instructed
- 11. Safety and Environment: Understand the purpose of safety procedures, and demonstrate safe work practices
- 12. Ethics and Integrity: Demonstrate knowledge of ethical standards, ethical issues, and ethical decision-making, and display honesty and fairness in interactions with others
- **13.** Appreciation of Diversity: Develop an understanding of and appreciate diversity and inclusion in the workplace; demonstrating respect for individual differences
- 14. Adaptation to Organization's Rules and Policies: Recognize, understand, and follow an organization's rules and policies, with minimal guidance
- 15. Response to Supervision: Openly accept direction and feedback and respond positively, incorporating feedback into work as required
- 16. Dependability: Gain the trust of others by being reliable and consistent in completing work and in meeting commitments, while demonstrating a very good work ethic

Work Term 3 - Skills Expectations

- 1. Initiative: Take independent action in completing assigned tasks, and show motivation in seeking new work
- 2. Organization and Planning: Prioritize work assignments based on their importance, and plan and use time efficiently and productively to complete work
- 3. Quality of Work: Produce good quality work with few errors, checking own work with minimal assistance
- 4. Productivity: Independently learn new material to consistently complete an assigned amount of work on time
- 5. Written Communication: Communicate ideas and information in writing clearly, concisely, and in an organized way, with some review and editing required
- 6. Verbal Communication: Verbally express ideas and information clearly, concisely, and in an organize way, with minimal clarification required; comfortable speaking to small group
- 7. Work Independently: Work independently on assigned tasks and projects, taking direction and seeking assistance as required
- 8. Teamwork: Be an effective team member by working collaboratively and cooperatively with others, assuming responsibility and accountability for tasks, and understanding importance of the student's role within the team
- 9. Problem Solving: Analyze engineering problems, evaluate alternatives, and propose solutions
- 10. Project Management Techniques: Demonstrate understanding of project, change, and/or risk management techniques and incorporate into work as required
- 11. Safety and Environment: Identify safe and unsafe work practices, follow safety procedures, demonstrate safe work practices, and understand the impacts of engineering on health and the environment
- 12. Ethics and Integrity: Contribute to helping to resolve ethical issues, demonstrate good judgment and understand issues around conflicts of interest, and display honesty and fairness in interactions with others
- 13. Appreciation of Diversity: Demonstrate ability to work in a diverse workplace; inclusive, respectful, and work well with others when there are individual differences
- 14. Adaptation to Organization's Rules and Policies: Recognize, understand, and follow an organization's rules and policies, with minimal guidance
- 15. Response to Supervision: Openly accept direction and feedback and respond positively, incorporating feedback into work as required
- 16. Dependability: Gain the trust of others by being reliable and consistent in completing work and in meeting commitments, while demonstrating a very good work ethic

Work Term 4 - Skills Expectations

- 1. Initiative: Take immediate action without prompting in completing assigned tasks or projects, and show motivation in pursuing work beyond assigned tasks
- 2. Organization and Planning: Prioritize work assignments based on their importance, and plan tasks and projects over a short- to long-term basis, using time efficiently and productively to complete work
- 3. Quality of Work: Produce very good quality and thorough work with few errors, independently checking work prior to completion
- 4. Productivity: Independently and quickly learn material to consistently complete an expected amount of work on time or earlier
- 5. Written Communication: Communicate complex ideas and information in writing clearly, concisely, and in a very organized manner, with minimal review and editing required
- 6. Verbal Communication: Verbally express complex ideas and information, clearly, concisely, and in a very organized manner, with clarification rarely being required; good public speaker
- 7. Work Independently: Assume responsibility for tasks and projects and work independently, seeking input from others when appropriate
- 8. Teamwork: Be an effective team member by working collaboratively and cooperatively with others, assuming responsibility and accountability for tasks and one's assigned role, and demonstrating leadership as required to provide direction to a small group of people
- 9. Problem Solving: Critically analyze engineering problems, evaluate alternatives, and recommend best course of action
- 10. Project Management Techniques: Use appropriate project management techniques as required, and incorporate principles of change and risk management into work
- 11. Safety and Environment: Understand and contribute to the importance of a safe work culture, demonstrate safe work practices, and understand the impacts of engineering on health and the environment
- 12. Ethics and Integrity: Demonstrate very good judgment and individual accountability in resolving ethical issues, avoid questionable conduct and conflicts of interest, and display honesty and fairness in interactions with others
- 13. Appreciation of Diversity: Support diversity and inclusion in the workplace; respectful and work well with others when there are individual differences
- 14. Adaptation to Organization's Rules and Policies: Independently recognize, understand, and follow an organization's rules and policies
- 15. Response to Supervision: Openly accept direction and feedback and respond appropriately, immediately incorporating feedback into current and future work
- **16. Dependability:** Gain responsibility and the trust of others by being reliable and consistent in completing work and in meeting commitments, while demonstrating a strong work ethic

Work Terms 5 and 6 - Skills Expectations

- 1. Initiative: Take all appropriate and required action without prompting in completing assigned tasks or projects, and show motivation in pursuing work and additional responsibilities beyond assigned tasks
- 2. Organization and Planning: Prioritize work assignments based on their importance, set realistic deadlines, and plan and use time efficiently and productively to complete short- to long-term tasks and projects
- 3. Quality of Work: Produce high quality and thorough work with very few errors, independently checking work prior to completion
- 4. Productivity: Independently and quickly learn complex new material and use existing knowledge to consistently complete an expected or greater amount or work on time or earlier
- 5. Written Communication: Communicate complex ideas and information in writing clearly, concisely, persuasively, and in a very organized manner, with review and editing rarely required
- 6. Verbal Communication: Verbally express complex ideas and information, clearly, concisely, persuasively, and in a very organized manner, with clarification rarely being required; very good public speaker
- 7. Work Independently: Assume complete responsibility for tasks and projects and work independently, demonstrating understanding of when to seek input from others when work is outside scope of knowledge or ability
- 8. Teamwork: Be a responsible, accountable, and effective team member by working collaboratively and cooperatively with others, and demonstrating leadership as required to direct and motivate a group of people to work together
- 9. Problem Solving: Critically analyze engineering problems, evaluate alternatives, predict outcomes, recommend best course of action, and formulate solutions or procedures
- **10. Project Management Techniques:** Use appropriate project management techniques as required, and incorporate plans to effectively manage change and analyze risk
- 11. Safety and Environment: Understand and contribute to the importance of a safe work culture, demonstrate safe work practices, and understand and analyze the impacts of engineering on health and the environment
- 12. Ethics and Integrity: Demonstrate excellent judgment and individual accountability in resolving ethical issues, with an understanding of potential outcomes and consequences, avoid questionable conduct and conflicts of interest, and display honesty and fairness in interactions with others
- 13. Appreciation of Diversity: Promote diversity and inclusion in the workplace; respectful, work well with others, and encourage others to work together despite individual differences
- 14. Adaptation to Organization's Rules and Policies: Independently and quickly recognize, understand, and follow an organization's rules and policies
- **15. Response to Supervision:** Seek constructive feedback to assist in one's own professional development, openly accept direction and suggestions, and respond appropriately, immediately incorporating feedback into current and future work
- **16. Dependability:** Gain added responsibility and the trust of others by being reliable and consistent in the completion of work and in meeting commitments, while demonstrating an excellent work ethic, putting in extra effort when required