

Technical Standards for Associate in Engineering

Our program technical standards have been developed to help students understand nonacademic standards, skills, and performance requirements expected of a student in order to complete this particular curriculum.

If an accommodation is necessary to participate in the program, it is imperative to identify a reasonable accommodations to those students who qualify under the Americans with Disabilities Act (ADA). Reasonableness is determined by the Disability Services Office (DSO) and the program on a case-by-case basis utilizing the program technical standards. The accommodation needs to be in place prior to the start of the program, or it may delay your ability to start the program. It is the student's responsibility to contact the DSO and request accommodations.

Skills	Description	Specific Examples
Critical Thinking	Engineers must be able to provide objective analysis from varying perspectives to make informed decisions	An engineer may be called upon to participate in decision-making that challenges her belief system. She must be willing to engage in critical thinking based on facts and evidence to make ethical decisions that may contradict her feelings.
Problem Solving	Engineers must be able to identify problems and work persistently to solve them.	Engineers participate in all manner of problem solving including but not limited to: eliminating world hunger, addressing environmental issues, programming compute software, creating and improving medical devices, designing buildings, roads and bridges, designing air and space travel, etc.

Skills	Description	Specific Examples
Collaborative Work	Engineers must be willing to work on a team and embrace colleagues from diverse backgrounds and perspectives.	An engineer may be assigned to a team with which she is unfamiliar in order to make a plan or solve a problem. It is possible that there are varying levels and areas of expertise and backgrounds. An engineer must value all contributors.
Individual Innovation	In addition to working on a team, engineers must be able to work creatively, confidently and independently.	While working on a project (with or without a team) an engineer is held personally accountable for meeting deadlines and goals. She is expected to think for herself, in addition to integrating with a team.
Efficiency	Engineers work to complete tasks “on time and on budget,” so managing multiple priorities is paramount.	An engineer is expected to be a creative and critical thinker, but also to provide good solutions that require the least time and funding, while still effectively meeting the goal. They engage in a LEAN methodology, which when implemented correctly will eliminate waste, improve workflow, and maximize efficiency.
Technology	Engineers use software to design projects.	An Engineer is expected to adapt to a variety of software programs for project design and analysis. Technology changes quickly and varies among industry, so

Skills	Description	Specific Examples
		commitment to lifelong learning is essential.

This document is intended to serve as a guide regarding the physical, emotional, intellectual and psychosocial expectations placed on a student. This document cannot include every conceivable action, task, ability or behavior that may be expected of a student. Meeting these technical standards does not guarantee employment in this field upon graduation. Ability to meet the program's technical standards does not guarantee a student's eligibility for any licensure, certification exam, or successful completion of the degree program.