

**Essential Skills**  
**Engineering Technology**  
**(Computer Aided Drafting)**

The essential skill sheets are lists of the most commonly encountered qualities and skills typically necessary to be successful in a particular program or area of interest. The information contained in an essential skills sheet is not all-inclusive and is intended to be used as a guide only. Individual programs may have specific requirements or technical standards that must be met.

**Physical**

Arm-hand coordination	Key/Type
Arm-hand steadiness	Feel vibrations
Detect difference in visual details	Hand-eye coordination
Draw, sketch or form common shapes, forms and figures	Hear faint, normal, and distant sounds
Hear activities/commands given within 20 feet	Twist
Feel differences in surface characteristics	
Maintain balance (sit, stand, squat)	
Move within confined spaces	
Pinch, grasp, squeeze, and manipulate objects	
Push, pull, lift and/or support a minimum of 25 pounds	
Reach above shoulders	
Reach below waist	
Sit for long periods of time	
Sustain repetitive movements	
See objects 20 inches to more than 20 feet away	
Write with pen/pencil	
Distinguish colors and changes in its variation	

**Cognitive**

Accurately recall information	Follow directions (written/verbal)
Anticipate when something is likely to go wrong	Identify symbols and icons
Apply knowledge from one situation to another	Interpret information
Calculate/measure areas, perimeters, and volumes	Detail oriented
Calculate using calculator	Estimate times
Calculate using computer	Problem solve
Calculate using pen/paper	Process information
Categorize information	Use a computer (email/internet/other)
Combine knowledge and skills	Work accurately
Follow and retain visual model or demonstrated instructions	
Follow and retain written instructions (technical/multi-step)	
Follow written information, charts, drawings	
Organize tasks to meet deadlines (hourly, daily, long-term)	
Differentiate between objects of similar shape/color	
Perform multiple responsibilities concurrently	
Evaluate the complexity of jobs	
Focus attention on task	
Follow and retain oral instruction (multi-step)	

**Communication**

- Communicate in a professional/tactful manner
- Communicate using a telephone
- Deliver presentations to wide range of audiences
- Discuss ongoing projects/work
- Explain/express ideas and opinions
- Give directions
- Read, write, speak, and comprehend English effectively
- Record written information
- Present supporting facts/recommendations

**Behavioral**

- Accept cognitive criticism
- Adapt to changing situations
- Complete responsibilities in a timely manner
- Cooperate with others individually or in a team setting
- Dependability
- Exercise accountability
- Exercise independent judgement
- Exhibit social skills appropriate to professional interactions
- Maintain professional appearance
- Perform accurately and quickly even under stressful conditions
- Self-motivation and initiative
- Work carefully while maintaining efficiency and organization
- Work independently with limited supervision
- Exhibit social skills appropriate to professional interactions
- Maintain professional appearance

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**Other**

See program or desired area of employment for specifics - Prerequisites