

PROGRAM GRADUATE COMPETENCIES: CORE AND TECHNOLOGY PROGRAMS

CORE CURRICULUM COMPETENCIES

(Approved by President George and President's Council 8/25/98)

The graduate will be able to:

1. Communicate clearly and effectively both orally and in writing. **2004**
2. Demonstrate effective problem solving and reasoning skills.
3. Work effectively in groups of people from diverse backgrounds.
4. Demonstrate ethical and professional understanding and conduct.
5. Apply appropriate information literacy skills to locate, evaluate and use information effectively. **2004**
6. Use computer technology appropriate to the field.
7. Use scientific and mathematical reasoning appropriate to the technology. **2006**

The Core Curriculum Competencies apply to all Associate Degree programs at the College. These are incorporated into each curriculum either by a course or by being integrated into coursework. These competencies are incorporated into each program review employer survey.

Mechanical Engineering Technology Program Program Graduate Competencies (2007)

The graduate will be able to:

1. Use effective problem-solving skills and make appropriate decisions relative to the technical field.
2. Design basic mechanical systems with the use of computer-aided drafting equipment.
3. Demonstrate basic computer literacy and knowledge of computer software applications in both the business and technical fields.
4. Use hand and power tools for standard manufacturing operations.
5. Conduct basic machining and welding operations; and perform basic programming of computer/numerically-controlled machines.
6. Calculate forces, properly size structures and mechanical components, and perform standard materials testing procedures.
7. Demonstrate an understanding of basic AC and DC electrical control circuits.
8. Select appropriate materials for basic mechanical applications.
9. Review and/or design basic hydraulic/pneumatic power systems.
10. Select basic machine components for mechanical systems.
11. Exhibit professional traits, including the ability to work with minimal supervision, willingness to learn new skills, and contributing to team project efforts.