

Mechanical Engineering Technology Program Educational Objectives

The purpose of the Mechanical Engineering Technology (MET) program is to develop, in each student, the degree of technical competence that would allow the graduate to be employed as a mechanical engineering technician in any engineering company. The skills required can be broken into six major categories which are:

1. *Mechanical Ability*

The ability to relate to mechanical systems or processes in the engineering environment is the desired outcome. Developing, analyzing, and visualizing various types of engineering drawings and specifications are required activities. Mechanical ability is developed by Technical Specialty Courses and Basic Sciences.

2. *Accuracy*

The ability to solve engineering problems properly and systematically is the desired outcome. A thorough understanding of mathematics and the design process is required. Accuracy is developed by Basic Sciences and Basic specialty Courses.

3. *Manual Dexterity*

The ability to use a wide variety of "mechanical tools", comparable to those used by mechanical technicians, is the desired outcome. A respect for these "tools" and a pride in one's workmanship is developed. Manual dexterity is developed by Technical Specialty Courses and Technical Electives.

4. *Creativity & Confidence*

The ability to communicate engineering principles both practically and theoretically is the desired outcome. The variety of courses allows for some improvising in the solutions to the problems at hand. Creativity is developed by Technical Specialty Courses. Confidence is developed by Humanities Courses and Communication Courses.

5. *Effective Communication & Teambuilding*

The ability to communicate engineering and design information and concepts by oral presentation or in technical reports, in a manner that would gain approval and support, is the desired outcome. Another desired outcome is the attainment of proper social adjustment, which requires positive interaction among colleagues and customers. This interaction outcome is reinforced through teambuilding activities embedded within our technical curriculum and student organizations.

6. *Technical Currency*

MET students are encouraged to actively participate in the local, technical societies as student members. The intent is to encourage exposure to "state of the art" MET practices. Technical currency is developed by ASME, ASQC, AEMS, etc. and Technical Societies.

Besides the technical and professional skills that our students desire to achieve, another objective is continuing their education for a bachelor degree or beyond. The college has articulation agreements with many universities in the area and Ohio. For instance the University of Akron maintains an accredited Bachelor of Science in Engineering Technology (BSET) and is located within an easy commuting distance for prospective students from this area. Our graduates have been accepted into the BSET program at the University of Akron, with a minimum of difficulty. Many have gone on to graduate with the BSET degree.

The continuous improvement of the program is assured through an advisory committee whose members are experts in their field. The committee is made from private and public business representatives mostly in the field of design and mechanical areas, both in the design and application sides. It is also made from the faculty members in the program. Some members change periodically in order to maintain a fresh perspective while maintaining continuity from the remaining members.