LAKELAND COMMUNITY COLLEGE
TAC-ABET ACCREDITED MECHANICAL ENGINEERING TECHNOLOGY
PROGRAM EDUCATIONAL OBJECTIVES AND STUDENT OUTCOMES

PROGRAM EDUCATIONAL OBJECTIVES

Program Educational Objectives (PEO) are broad statements that describe what graduates are expected to attain within a few years of graduation. Program Educational Objectives are based upon the needs of the various program constituencies. The published and adopted PEO is listed below:

The Mechanical Engineering Technology Program is designed to prepare students for immediate employment as a technician. The curriculum includes a strong emphasis on the generation of production-level computer-based documentation, analysis of form, fit and function, and design verification through testing. Graduates will be able to: (1) solve technical problems typical of those encountered in mechanical engineering technology careers using creativity, current technology, and the principles of mathematics and applied science; (2) perform and evaluate laboratory experiments, interpret and report on the results, and make recommendations for improvements; (3) work and communicate effectively in a diverse multi-disciplinary team in an industrial and academic setting; and (4) understand modern quality principles, professional issues, and the need to pursue lifelong learning.

STUDENT OUTCOMES

Student Outcomes (SO) describe what students are expected to know, and to be able to do, by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the Engineering Technology (ET) programs. The Engineering Technology departments have adopted the following TAC-ABET SO:

a. an ability to apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities;

b. an ability to apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge;

c. an ability to conduct standard tests and measurements, and to conduct, analyze, and interpret experiments;

d. an ability to function effectively as a member of a technical team;

e. an ability to identify, analyze, and solve narrowly defined engineering technology problems;

f. an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature;

g. an understanding of the need for and an ability to engage in self-directed continuing professional development;

h. an understanding of and a commitment to address professional and ethical responsibilities, including a respect for diversity; and

i. a commitment to quality, timeliness, and continuous improvement.