Program Review Final Report

for

Mechanical Engineering Technology

Submitted to

Dr. Eric McKeithan, President (and serving as interim Vice President of Instruction)

by

Program Review Committee Chair:
Robert Philpott, Dean of Vocational/Technical Education

Program Review Team:
Grant Moyer, Lead Instructor Mechanical Engineering Technology
Shawn Russell, Engineering Department Chair
Amanda Lee, Associate Vice President of Instructional Operations
Jonathan Begue, Lead Instructor Construction Management
Joe Justice, Lead Instructor Industrial Systems Technology
Matthew Thomas, Career and Job Placement Specialist
Patsy Lackey, Administrative Assistant to the VP of Institutional Effectiveness

Signatures:

Lead Instructor: Grant Moyer 6-28-10

Instructional Dean: [Signature]

Dept. Chair: Shawn Russell 6/29/10
I. List of Team Members

Grant Moyer, Lead Instructor Mechanical Engineering Technology
Shawn Russell, Engineering Department Chair
Robert Philpott, Dean Technical/Vocational Education
Amanda Lee, Associate Vice President of Instructional Operations
Jonathan Begue, Lead Instructor Construction Management
Joe Justice, Lead Instructor Industrial Systems Technology
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II. Analysis of Results:

A. Strengths

Program enrollment is strong and growing with good diversity in the program.

The graduation rate is good and increasing as enrollment increases.

The program offers an AAS degree, a diploma and certificate which provide many opportunities for students.

Instructors are enthusiastic, professional and talented, and maintain certifications and participate in other professional development activities to remain current in their field.

On the Graduating Student Opinion Survey, 93% of respondents indicated they were satisfied with the quality of the program. The remaining 7% either omitted the question or marked more than one answer and could not be counted.

On the Currently Enrolled Student Survey 93.3% of respondents indicated they are satisfied with the quality of instruction and the overall program. The remaining 3.33% expressed some dissatisfaction with the program and 3.33% omitted the question.

Most of the program objectives in Strategic Planning on Line (SPOL) are student learning outcomes.

B. Weaknesses

The electronics component of the program is not strong enough for students to be able to be successful in the new development in bio-mechanical.
The math and physics offered in the program needs to be calculus based instead of algebra based so that students who transfer do not need to take other college math courses.

There is poor participation by the current Advisory Committee.

Some equipment (computers, plotter) and software (Inventor, operating system) need to be updated in order to stay on the cutting edge of technology.

C. Opportunities

Even though there are no formal articulation agreements East Carolina University and UNC Charlotte are great transfer option for MET graduates. These universities accept most of the MET credits in their program which allows graduates to pursue their four year degree.

Hybrid course is being developed to offer students more learning opportunities.

A 3-D scanner for reverse engineering that can be fed into CAD software would be a tremendous asset to the program.

Threats

Software changes so rapidly within the industry that budget constraints could prevent the purchase of new software during the next budget cycle.

A new Inventor software program is now available but will not work with our current operating system. Computer hardware and software will need to be updated in order to stay on the cutting edge of technology for our students.

New programs, such as Nuclear Technology, have been added that could draw students away from the Mechanical Engineering Technology program thus reducing enrollment.

III. Committee Recommendations

The team recommended that the college:

Continue program with recommendations.

Continue to stay up to date with equipment and software by requesting needed equipment and software at the annual budget hearings.

Seek new membership for the MET Advisory Committee in order to have input from industry leaders in keeping the program current.

Continue developing hybrid courses for better access for students.
Submit needed changes in the curriculum to the Curriculum Committee for review and/or approval.

Review again in five years.