Edison Community College
Associate of Applied Science degree in Equipment Maintenance Technology

Executive Summary/Recommendation

This program clearly meets Regent’s standards for associate degree programs. There were no serious concerns raised in this review.

Request: Edison Community College has developed an Associate of Applied Science degree in Equipment Maintenance Technology in response to the growing need for trained equipment maintenance technicians in this area of the state and throughout Ohio. Ohio’s manufacturing, construction, agriculture, and outdoor power equipment companies are experiencing a serious shortage of trained qualified technicians to service, repair and maintain their equipment.

Recently, the Ohio/Michigan Equipment Dealers & Distributors Association conducted a survey of its membership and found an estimated 2,250 service technician vacancies will occur in next three to five years. That equates to almost 2.5 service technicians per equipment dealer and for Ohio an average of 1.6 technician vacancies per equipment dealer.

The Ohio Talent Team Report released in January 2007, states, “for Ohio to compete successfully in today’s global economy, it must have a world-class 21st century workforce. Its workers must have the strong work ethics, but they must also have strong academic, workplace and technical skills.” It’s imperative that Ohio’s manufacturing, construction and agriculture companies have the skilled trained workforce they need to remain competitive and ensure Ohio’s economic growth and success.

Program Purpose/Mission: For a number of years, Edison Community College has been offering a successful non-credit Industrial Maintenance Program, through its Business and Industry Division, developed in partnership with the Bobcat Corporation. As a result of this successful training program, Toro, Volvo, Stihl and Bobcat all expressed their interest in a degree program for their employees. Company representatives meet the College’s Advisory Committee; Vice President for Education, and faculty to relate their current and future need for trained qualified technicians based on pending company retirements and projected company growth for the next ten years. To further endorse their support and reduce the College’s need for capital improvement funds, the companies are willing to donate the equipment needed for skill building, training and hands-on-learning experiences.

The degree program builds on the success of the non-credit Industrial Maintenance Program and offers two specific program concentrations: 1) Mobile Powered Equipment that addresses the need for trained technicians in the construction, agriculture and outdoor power equipment industries, and 2) Industrial Equipment that addresses the need for trained technicians in the manufacturing and other related industries.

Students enrolled in the program will learn the fundamentals of servicing, repairing and maintaining industrial and mobile-powered machinery. Course work includes hands-on lab experience needed to learn how to service, repair and fix mechanical, electrical and hydraulic engine systems. Students focusing on the industrial equipment will have additional training in programmable logic controllers, industrial automation and
robotics. The mobile powered equipment students will have additional training in gasoline and diesel powered engines, power trains and mobile heating and air conditioning systems.

An off-campus internship program will give students beneficial on-the-job training experiences and the opportunity to work with some of Ohio’s largest manufactures. Students who have a successful internship experience maybe offered an entry level position with that company,

Students successfully completing this program will be eligible to take the Equipment and Engine Training Council (EETC) and the Fluid Power Society test, to become a Certified Fluid Power Mobile Hydraulic Mechanic.

The program will attract the areas high school students, College Tech Prep students, dislocated, downsized and incumbent workers, looking for a career and job opportunities as a qualified trained service technician.

Enrollment: The projected student enrollment for the program is 16 full time students and 20 part-time students for 2008, with an additional 10 full and part time students projected for 2009-2011. Additional students maybe forthcoming as the partner companies and the Ohio/Michigan Equipment Dealers & Distributors assist in the marketing efforts of this program.

Also, it is anticipated that some of the individuals currently enrolled in the non-credit training program may consider enrolling in the new degree program increasing even more the projected number of students.

Curriculum: The curriculum incorporates a cognitive learning environment for the general education requirements and provides a numerous hands-on-learning experiences for the technical learning of the course content.

Edison Community College worked in collaboration with the areas five Adult Career Centers (Apollo Career Center, Miami Valley Career Technical Center, Ohio Hi-Point, Tolles Technical and Career Center and Upper Valley Joint Vocational School), to ensure students enrolled in their Industrial and Mechanical Engineering College Tech Prep Programs could articulate into the program.

The College’s Advisory Committee, manufacturing industry, equipment dealership owners, technical service executives, and the adult career centers instructors gave input, guidance and support to the curriculum’s development.

Faculty/Resource Needs: The Engineering Technology Department administered by the Dean of Engineering Technology and Workforce Development and under the administration of the Vice President for Education, will provide oversight for the new program.

The College plans to use its current engineering faculty and some adjunct faculty who have the required degree and certifications needed to teach the technical courses.
Space in the College’s current manufacturing lab used by Bobcat will be expanded to accommodate additional day-time and evening students. The utilization of current space and donation of the large equipment reduce the need for any financial start-up costs.

**Program Duplication:** Presently, this program is not being offered at any other two-year institution within the region of the College. A similar program is being offered at Owens Community College in Toledo for the John Deere Company.

**Employment Opportunities:** Graduates of the program will find employment opportunities as service technicians, equipment repair specialists, field service technicians, maintenance technicians, engineering technicians and others.

End of Comment Period: May 21, 2008
No Comments Received, Recommend Approval

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Approved

Eric D. Fingerhut, Chancellor

Date 6/16/08