

**STATE BOARD OF COMMUNITY COLLEGES
CURRICULUM PROGRAM APPLICATIONS
Fast Track for Action [FTFA*]**

***Fast Track For Action:** Program applications must meet the following criteria in order to be placed on the FTFA program approval request presented to the State Board of Community Colleges as part of the consent agenda:

- The curriculum program title currently exists within the System and does not require the creation of a new program title and new curriculum standard;
- The application is complete, requires no further analysis or documentation, and has the endorsement of Academic Programs;
- There are no negative impact assessments from other colleges; and
- The college does not go outside of its service area for planning purposes.

The State Board of Community Colleges is asked to approve the curriculum program at the listed college on the condition that equipment funds are available to the college and operating funds generated by the budget formula will permit the offering of this program without any special allocation of funds.

Piedmont Community College
Mechatronics Engineering Technology (A40350)

Contact Person:
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Academic Programs

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT**
Piedmont Community College
Mechatronics Engineering Technology (A40350)

I. Program Planning

Piedmont Community College (PCC) is seeking approval for the Mechatronics Engineering Technology (A40350) program to begin Fall 2016. The planning area is defined as the college's service area of Caswell and Person counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at PCC on April 21, 2015. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of PCC have certified the following:

- The proposed program will enhance the workforce of North Carolina, will provide educational and training opportunities consistent with the mission of the college, and will not duplicate the opportunities currently offered.
- They have assessed the need for the proposed program and the resources required to maintain a viable program and certify that the college can operate the proposed program efficiently and effectively within the resources available to the college.
- The college will complete a program accountability report including student success measures, enrollment trends, completion rates, and employment data three years after implementation of the program.

II. Program Rationale

Piedmont Community College indicated the following:

- According to data provided by the U.S. Bureau of Labor Statistics there is 25.7% growth projected in mechatronics industries nationally. North Carolina has the 4th highest estimated growth rate (53.4%) in the nation for mechatronics engineers and technicians.
- NCWorks Online posted over 200 regional positions on their job search website for maintenance technicians within the "North Central Prosperity Zone". This is one of eight newly established regions created by NC Commerce containing one of the college's two counties.
- The U.S. Department of Labor estimates that the average annual salary for mechatronics engineering technicians is \$38,394.
- A letter of support for the program was received by the college from local company Louisiana Pacific Building Products. The company suggested that there currently exists a skills-gap between the competencies potential hires possessed and the skills that are required to maintain modern industrial equipment. Hiring considerations would be favorable for individuals possessing mechatronic-specific skill sets.

- The college surveyed one hundred eighty-five Piedmont Community College and local high school students. One hundred fourteen students indicated that they were very interested in enrolling in the mechatronics program.
- The college received a letter of support from Person County Schools' Career and Technical Education Director in support of the mechatronics program and also reaffirming the strong collaborative partnership that exists between the school system and Piedmont CC that is the basis for continued student success strategies such as the newly proposed program.

III. Impact of the Proposed Program on Other Programs

Fifteen colleges are currently approved to offer the Mechatronics Engineering Technology (A40350) program. An impact assessment was sent to colleges located in contiguous counties. No negative impact responses were received.

IV. Implementation of Collaborative Plan

Not Applicable

V. Curriculum Design

The proposed program of study is in compliance with the State Board approved curriculum standard.

VI. Curriculum Description as Designated on Curriculum Standard

A course of study that prepares the students to use basic engineering principles and technical skills in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures. Graduates should be qualified for employment in industrial maintenance and manufacturing including assembly, testing, startup, troubleshooting, repair, process improvement, and control systems, and should qualify to sit for Packaging Machinery Manufacturers Institute (PMMI) mechatronics or similar industry examinations.

Coordinator: Mr. Frank Scuietti