QUEENSBOROUGH COMMUNITY COLLEGE

CITY UNIVERSITY OF NEW YORK
CURRICULUM COMMITTEE

To: Emily Tai, Academic Senate Steering Committee

From: Philip A. Pecorino, Chairperson, Committee on Curriculum

Date: October 27, 2009

Subject: Monthly Report

The Committee on Curriculum has acted to send the following recommendation to the Academic Senate.

I. Deletion of Certificate Programs

In the Department of Mechanical Engineering Technology & Design Drafting:

Deletion of two Certificate Programs:

1. Computerized Manufacturing Technology Certificate Program
2. Computerized Architectural Design and Drafting (CAD) Certificate Program

Rationale: Enrollment has been insufficient over several years in both of these programs.

II. Course Changes

In the Department of Electrical and Computer Engineering Technology
Prerequisites: ET-560, ET-350 and ET-420.

From:
ET-560 Microprocessors and Microcomputers†
3 class hours 3 laboratory hours 4 credits
Prerequisite: ET-509 [and ET-510 or ET-540]

Study of microprocessor and microcomputer systems. Topics include: microprocessor architecture, memory and memory interfacing, I/O systems, interrupt processing, microprocessor communications, and microcomputer peripherals. Laboratory hours complement class work.

To:
ET-560 Microprocessors and Microcomputers†
3 class hours 3 laboratory hours 4 credits
Prerequisite: ET-509, ET-210, either ET-510 or ET-540

Study of microprocessor and microcomputer systems. Topics include: microprocessor architecture, memory and memory interfacing, I/O systems, interrupt processing, microprocessor communications, and microcomputer peripherals. Laboratory hours complement class work.

Rationale:

The ET2 and CT2 curricula and course sequencing were revised a few years ago and require changes in prerequisites. The prerequisite ET-210 is added because ET-560 is a third semester milestone course which requires concepts from ET-210 in addition to the prerequisites for ET-210. Before the curricular revision, ET-210 was a prerequisite for ET-540 and ET-510 and so by default also for ET-560. Now that ET-510 and ET-540 have become first semester courses with no prerequisites, the prerequisites must become explicit to ensure that students have the appropriate background. The wording on the prerequisites is also clarified.

From:
ET-350 Computer Control Systems
3 class hours 3 laboratory hours 4 credits
[*Prerequisite: ET-220, 503.*]

Servomechanism components, operational amplifiers, Laplace transforms, transfer functions, block diagram algebra, steady state and transient analysis of second order system, digital-to-analog and analog-to-digital converters, shaft encoders, stepper motors, data acquisition, sample/hold, multiplexers, filters, pulse code modulation, remote control systems, robotic applications. Laboratory hours complement class work and include the use of microcomputers.

To:
ET-350 Computer Control Systems
3 class hours 3 laboratory hours 4 credits
Co-requisite: ET-560

Servomechanism components, operational amplifiers, Laplace transforms, transfer functions, block diagram algebra, steady state and transient analysis of second order system, digital-to-analog and analog-to-digital converters, shaft encoders, stepper motors, data acquisition, sample/hold, multiplexers, filters, pulse code modulation, remote control systems, robotic applications. Laboratory hours complement class work and include the use of microcomputers.

Rationale:

The CT2 curriculum was revised a few years ago and requires changes in prerequisites. ET-220 and ET-503 are no longer part of the CT2 curriculum. Since the course includes use of microcomputers, ET-560 (Microprocessors and Microcomputers) is a logical co-requisite.

From:
ET-420 Computer Project Laboratory†
3 laboratory hours 1 credit
Prerequisite: [ET-501, and either 510 or 540.]

A practical course exposing the student to the design, fabrication, assembly and trouble-shooting techniques associated with the manufacture and servicing of computer-controlled devices. Working individually, students construct finished products employing Computer Aided Design software, the departmental printed circuit fabrication facility, small tools and test equipment.

To:
ET-420 Computer Project Laboratory†
3 laboratory hours 1 credit
Prerequisite: ET-560.

A practical course exposing the student to the design, fabrication, assembly and trouble-shooting techniques associated with the manufacture and servicing of computer-controlled devices. Working individually, students construct finished products employing Computer Aided Design software, the departmental printed circuit fabrication facility, small tools and test equipment.

Rationale:

The CT2 curriculum was revised a few years ago and requires changes in prerequisites. The prerequisite requirement of ET-560 is added to ET-420 because ET-420 is a fourth semester capstone course which requires concepts from ET-560 and all previous courses.

These revisions were unanimously approved by the department and are needed as a result of previous changes to the ET2 and CT2 curricula. The revisions are fully compliant with all the new Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET) Criteria.