

THE UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE

FACULTY SENATE

Senate Document Number 1914S

Date of Senate Approval 1/23/14

Statement of Faculty Senate Action:

APC Document 7

Delete ECE 460 and EGM 482 from the catalog

Effective Date: Fall 2014

1. Delete: On page 138, under Courses in Electrical and Computer Engineering (ECE):

460 Digital Systems Interfacing (3)

Concepts of microcomputer system architecture and applications to fundamental computer hardware. Theoretical and practical aspects of interfacing and a variety of microprocessor peripheral chips with specific microprocessor/microcomputer systems from both hardware and software points of view. Prerequisite: ECE 301. Spring.

Impact: There will be no change in the total number of hours required for the JEM (Joint Engineering with a Mechatronics concentration) degree. There will be no impact on the resources and staffing of the Engineering program due to this change. In its place, ECE 456 (3) will be offered.

Rationale: The course ECE 460, Digital Systems Interfacing, is no longer going to be offered by the ECE Department at NC State. It will be removed from the NC State catalog. ECE 460 is a requirement of the MCTR Mechatronics curriculum. ECE 456 is already listed in the catalog as an alternative to ECE 460; either course satisfies the requirements outlined in Mechatronics curriculum.

2. Delete: On page 138, under Courses in Engineering-Mechatronics (EGM):

482 Senior Design Project in Mechatronics Engineering (4)

Applications of engineering and basic sciences to the total design of electro-mechanical systems. Consideration of the design process including feasibility study, preliminary design detail, cost effectiveness, along with development and evaluation of a prototype accomplished through design-team project activity. Complete written and oral engineering report required. Prerequisites: EGM 360 and senior standing in JEM. See program director.

Impact: There will be no change in the total number of hours required for the JEM (Joint Engineering with a Mechatronics concentration) degree. EGM 484 and 485 are already in the catalog and offered in place of EGM 482. There is little impact on the resources and staffing of the Engineering department at UNC Asheville as a result of this change.

Rationale: Replacing the four-credit hour, one semester long senior project course, EGM 482, with a two-semester course sequence of EGM 484 and 485, having identical credit hours allows greater pedagogical flexibility. EGM 484 and 485 are currently in the catalog and students are currently enrolled. Students benefit from the additional time allowed for identification of a suitable project and documentation and publication of the project following its completion.