THE UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE FACULTY SENATE

Senate Document Number	<u>1112F</u>
Date of Senate Approval	<u>12/06/12</u>
Statement of Faculty Senate	Action:
EC	dd two new courses: GM 484, Senior Design Project in Mechatronics Engineering I, and GM 485, Senior Design Project in Mechatronics Engineering II

Effective Date: Fall 2013

1. Add: On page 137, under Courses in Engineering-Mechatronics (EGM) new courses, EGM 484 and EGM 485, Senior Design Project in Mechatronics Engineering I and II:

484 Senior Design Project in Mechatronics Engineering I (3)

In this laboratory course, students will be exposed to the fundamentals of the engineering design process via the construction of a prototype mechatronics system in a team environment. Prerequisite: EGM 360 and senior standing in JEM. Fall.

485 Senior Design Project in Mechatronics Engineering II (1) In this laboratory course, students will develop and refine oral, written and graphical communication skills as their senior design project is finalized, presented and demonstrated. The course is conducted in a team environment. Prerequisite: EGM 484. Spring.

Impact: JEM (Joint Engineering with a Mechatronics concentration) majors will now take this two course sequence instead of EGM 482. The total number of hours required for this two semester course sequence is the same as EGM 482. Although the courses will be taught locally, there will be 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 identical credit hours allows greater pedagogical flexibility. Students will benefit from the additional time allowed for identification of a suitable project and documentation and publication of the project following its completion.