

THE UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE
FACULTY SENATE

Senate Document Number 11016S

Date of Senate Approval 05/05/16

Statement of Faculty Senate Action:

APC Document 93:

**Change Requirements for Engineering with a
Mechatronics Concentration**

Effective Date: Fall 2016

1. Delete: On page 135, items I and III:

- I. Required courses in the major—67 hours: E 101; ECE 109, 200, 209, 211, 212, 220, 301, 310, 455, ECE 456 or MAE 308; EGM 180, 360, 484, 485; MAE 206, 208, 301, 310, 314, 315, 316, 435; MSE 201.
- II. Required courses outside the major—31 hours: CHEM 111, 132; ECON 102; MATH 191, 192, 291; PHYS 221, 222; STAT 225.
- III. Other departmental requirements—Senior demonstration of competency in the major, oral competency, and computer competency are satisfied by the successful completion of EGM 484 and 485, the Senior Design Projects.

Add: On page 135, in place of deleted entries:

- I. Required courses in the major—71 hours: E 101; ECE 109, 200, 209, 211, 212, 220, 306, 310, 456; JEM 123, 180, 360, 484, 485; MAE 201, 206, 208, 214, 308, 310, 315, 316, 435; and one advisor-approved elective from ECE 455, JEM 420 or MSE 201.
- II. Required courses outside the major—31 hours: CHEM 111, 132; ECON 102; MATH 191, 192, 291; PHYS 221, 222; STAT 225.
- III. Other departmental requirements—Senior demonstration of competency in the major, oral competency, and computer competency are satisfied by the successful completion of JEM 484 and 485, the Senior Design Projects.

Impact: Only two of the courses added to the JEM curriculum, JEM 123 and JEM 420, are taught locally. JEM 123 is a 1-credit hour required course, and JEM 420 is an elective. There will be little impact on the resources and staffing of the Engineering Department at UNCA as a result of these additional courses.

Rationale: The changes to the JEM curriculum have been approved by NCSU Engineering which is responsible for the Engineering content of the JEM Program.