## ALUM18 14JEM

## JEMintro1 2018 Alumni Survey: Engineering - Mechatronics Concentration

The joint Engineering - Mechatronics Concentration of North Carolina State University and the University of North Carolina at Asheville has defined specific Program Educational Objectives that graduates are expected to attain within a few years after graduation. As part of our ABET accreditation, we must demonstrate the extent to which our graduates have attained these Program Educational Objectives since graduating from NC State. We appreciate your taking the time to answer these questions.

JEM1 For each of the following Program Educational Objectives (PEOs), please consider your experiences and opportunities since earning your undergraduate degree in Engineering - Mechatronics Concentration, and indicate the extent to which you have attained the objectives described.

	Not at all attained (1)	To a small extent attained (2)	To a moderate extent attained (3)	To a large extent attained (4)	To a very large extent attained (5)	Not applicable (0)
Attain productive professional careers in mechatronics engineering or related fields (1)	0	0	0	0	0	О
Function in the workplace with appropriate professional and ethical responsibilities (2)	О	о	о	О	О	о
Make decisions with accountability for the social and environmental impact of their engineering practices (3)	О	О	О	О	О	о
Interact effectively with a diversity of individuals while viewing their own work in the broader context of our global society (4)	0	0	0	0	0	Э
Attain technical excellence by engaging in life-long learning (5)	О	О	О	О	О	O

JEM2 Please share any feedback you have on the appropriateness of the five Program Educational Objectives above. Specifically, which, if any, would you drop and why? What, if anything, is missing?

	Never (0)	Seldom (1)	Sometimes (2)	Often (3)	Routinely (4)
Applied mechanical engineering knowledge and skills (1)	O	0	О	0	О
Applied electrical engineering knowledge and skills (2)	0	0	O	0	O
Solved real world problems (3)	0	О	О	0	Ο
Designed mechatronic systems or devices (4)	o	0	О	0	O
Incorporated modern microelectronics, information technologies, and modern engineering tools for product design, development, and manufacturing (5)	•	0	0	O	Э
Analyzed solutions for design and project objectives (6)	O	0	О	0	O
Considered the impact of engineering solutions (7)	o	О	O	О	O
Exercised ethical and professional responsibility (8)	•	0	O	О	О
Communicated with diverse audiences (9)	o	0	O	ο	О
Prepared written reports and communications (10)	o	0	О	o	О
Made oral presentations (11)	0	О	Ο	Ο	Ο
Worked on a team (12)	0	О	О	0	Ο
Worked on a multi-disciplinary team (13)	0	О	0	0	Ο
Mentored others (14)	0	О	0	0	Ο
Managed others (15)	•	О	0	0	Ο
Managed projects (16)	0	О	0	0	Ο
Provided leadership (17)	0	О	О	0	Ο

JEM3 How often have you done each of the following activities since earning your undergraduate degree?

JEM4 Please indicate the number of times you have done each of the following since earning your undergraduate degree in Engineering - Mechatronics Concentration.

	Never (0)	Once (1)	Twice (2)	Three times (3)	Four or more times (4)
Attended events (e.g., networking events, product marketing fairs, career fairs) to learn about advances in my field (1)	О	0	0	О	О
Attended a conference in my field (2)	0	0	0	0	Ο
Published an article in a professional magazine or journal (3)	O	О	O	O	o
Submitted an invention disclosure or patent application (4)	O	o	o	O	o
Taken a short course/workshop in my field (5)	0	0	0	0	Ο
Taken a short course/workshop in a field outside my formal training (6)	O	O	Ο	Ο	o
Taken a semester-long course to broaden my knowledge in fields outside my formal training (7)	0	0	0	0	0
Taken a graduate course in my field (8)	0	0	0	Ο	О

JEM5 How many different professional organizations have you been a member of since graduating?

- O 0 (0)
- **O** 1 (1)
- O 2 (2)
- **O** 3 (3)
- **O** 4 or more (4)

JEM6 Have you obtained a postgraduate certificate since graduating? (Note: This does not include any advanced degrees you might have obtained, e.g., Master's, Doctoral, etc.)

- Yes (please specify what certificate(s) you have obtained) (1)
- O No (0)

JEM7 Have you obtained professional licensure?

- O Yes (1)
- No, but plan to do so in the next three years (2)
- No, but might do so at some point in the future (3)
- No, and do not plan on doing so (4)

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If Have you obtained professional licensure? Yes Is Selected

JEM9 In what field(s) did you obtain licensure? (mark all that apply)

- □ Electrical Engineering (1)
- □ Mechanical Engineering (2)
- Other Engineering (please specify) (3) \_\_\_\_\_

## Display This Question:

If Have you obtained professional licensure? No, but plan to do so in the next three years Is Selected

JEM8 Have you reviewed any licensure preparation materials?

- **O** Yes (1)
- O No (0)

## JEMoutro1

Thank you for completing the Engineer-Mechatronics Concentration Survey! Please be sure to click on the 'Next' button to submit your responses.

Depending on the major(s) in which you earned an undergraduate degree from NC State between Summer 2012 and Spring 2015, after clicking on the 'Next' button you might be directed to additional questions for your major(s). Your department very much appreciates your taking the time to answer these questions.