



The William States Lee
College of Engineering

310 Duke Centennial Hall
The University of North Carolina
Charlotte, NC 28223

704-687-8242
robejohn@uncc.edu

DATE: December 20, 2012

TO: Dr. Joan Lorden, Provost and Vice
Chancellor for Academic Affairs

FROM: Robert E. Johnson

RE: Systems Engineering and
Engineering Management

CC: Ertunga Ozelkan, Ron Smelser

I respectfully request that the Systems Engineering and Engineering Management (SEEM) program in The Lee College of Engineering be recognized as a department of the college. This request has no impact on funding and does not require the addition of any administrative personnel. The unit currently functions much like a department in the college. However, creating a unique identity for this unit is important to further grow the program; it will enhance our ability to recruit faculty and students. In addition, this will allow for consistent administrative processes and procedures for the faculty and students.

I have solicited input from the COE faculty, and the response has been uniformly positive. The SEEM faculty also discussed this topic at length at a faculty meeting, and they uniformly endorsed the proposal. The SEEM faculty examined the added burden that might be placed upon them due to their modest size, but they felt strongly that this was in the best interest of their program and students. They also reported that they believe any additional committee work that this change might entail can be handled.

The SEEM program currently has 6.5 full time tenure track faculty members (two currently being recruited), and one administrative SPA staff member. The faculty offices and laboratories reside in the Cameron Building. One faculty member was recently recruited in connection with the EPIC initiative and jointly works in the ECE and SEEM programs. The faculty deliver two degree programs, a BS in Systems Engineering and a MS in Engineering Management. The program has grown from 6 undergraduate students in 2008 to 85 in 2012, and the MS program has grown from 24 to 34 graduate students in that period (from the UNC Charlotte Fact Book, 5-Year Trend). The program also employs four adjunct faculty who deliver seven courses; two additional adjuncts are being added through EPIC to support a new energy systems concentration.

The SEEM program also offers the engineering management program through online delivery. Additionally, the Center for Lean Logistics and Engineered Systems offers faculty across the campus the opportunity to be engaged in industrial contact that affects the delivery of such diverse areas as healthcare and manufactured goods. This center will only grow in importance in the coming years.

Based on the size of other programs nationally, I believe this program has the potential to double in size in a relatively short period of time. The systems engineering specialty, although somewhat new, has been routinely identified by industry in recent years as an important need for them. Interest in systems engineering is commonplace in traditional engineering fields from energy to manufacturing; even Bank of America lists this discipline as a recruiting need.