B.S. Science & Technology / Engineering Science Program Statements

The vision of the B.S. Science & Technology / Engineering Science program offered by the NJ Center for Science, Technology & Mathematics (NJCSTM) is to prepare students to pursue a career in one of several areas of engineering, including mechanical, electrical, chemical, biomedical, pharmaceutical, transportation, construction, structural and industrial engineering. The mission of this program is to provide a strong foundation for the pursuit of an accelerated master’s degree at The College of Engineering at The NJ Institute of Technology, which is the partner to Kean & NJCSTM. NJCSTM has two initial goals for this new program during its first recruitment period that is Fall 2011. First, to recruit women and minorities in order to increase the availability of undergraduates underrepresented in STEM disciplines to be trained in engineering science and equipped to work with culturally-diverse populations. And second, pursue opportunities for professional engineering experience for students through grant writing and partnership with industry and with other academic institutions.

B.S. Sci & Tech / Engineering Science Student Learning Outcomes (SLOs)

For the Student Earning a B.S. Degree in Science & Technology, Engineering Science Option

It is our expectation that graduates from the NJCSTM will have these characteristics:

- **SLO1**: Graduates will possess the ability to integrate mathematical modeling and computational tools to solve problems in a variety of engineering fields.

- **SLO 2**: Graduates will be able to combine critical thinking skills and practical knowledge to design, perform, and analyze engineering problems both as an individual and as effective and productive project team members.

- **SLO3**: Graduates will be able to verbally express themselves and communicate scientific comprehension and knowledge in both formal oral presentations and in written format clearly, concisely and accurately.

- **SLO4**: Graduates will know the origins of engineering science, modern day theory and application of this field of science and its importance to society.