

Nuclear Engineering Capstone Design Course

Executive Summary

The proposed project will: 1) Develop a new two-semester two-course sequence for the Nuclear Engineering Capstone Design Course; 2) Accordingly revise the undergraduate Nuclear and Radiological Engineering Program curriculum (serving approximately 200 students) at the Georgia Institute of Technology; 3) Develop a modular analytic toolbox with the corresponding lecture notes, Internet-based self-training modules, a set of practice exercises, and other instructional material to support the new two-semester sequence of the Nuclear Engineering Capstone Design Course; 4) Leverage the course development efforts to enhance the existing collaborative linkages with industry (i.e., AREVA, GE, Westinghouse, Southern Nuclear, VARIAN, and others) and National Laboratories (i.e., ORNL); as well as 5) Promote the recently initiated collaboration with a leading MSI (also in the Atlanta area), Morehouse College.

Specific features of the proposed two-semester two-course sequence:

- The sequence will be permanent, mandatory, senior year, undergraduate level.
- The courses are expected to reach over 200 students each over the next four years.

As a result, graduating Georgia Tech nuclear engineering students will be better prepared for employment in technical fields critical to NRC's regulatory mission, in other branches of government, research institutions, and the nuclear industry.

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