

## **Development of a Course on Nuclear Fuel Cycle**

### **Executive Summary**

The proposed work includes the development and implementation of a course on the Nuclear Fuel Cycle at Tuskegee University (TU). The Principal Investigator has already developed five courses at TU, in nuclear engineering, with past funding support from DOE, NNSA, and NRC. The proposed course at TU will be structured so that it compliments these five existing courses, and it will be offered as a 3-credit hour, technical elective course to seniors in engineering, in the Spring 2013 semester. Our ultimate objective is to have a comprehensive curriculum for a Minor concentration of study in Nuclear Engineering at TU within the existing Mechanical Engineering program.

The first semester of activity will be concentrated on course development by the PI. Eight students are expected to take this course. Students graduating with a strong knowledge of the nuclear fuel cycle will be better able to secure jobs with nuclear industry, NRC, and DOE National Laboratories. The broader impact resulting from the proposed activities include production of higher quality engineers. Additionally, many African-American graduates with knowledge of the nuclear fuel cycle will be produced over the next 10 years. These graduates may serve as role models for many young minority science and engineering students in years to come.

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