Project 3

Implementing the Agricultural and Environmental Sciences Engineering Doctoral Program at Tuskegee University.

Project Summary

**Funding Source:** USDA National Institute of Food and Agriculture (NIFA) CBG


This teaching proposal is requesting funds to support Tuskegee University’s initial efforts to establish a new Ph.D. program in Agricultural and Environmental Sciences Engineering. The Ph.D. program thrust areas are: Environmental and Natural Resource Sciences Engineering, Renewable and Bio-energy, and Food Science and Processing Engineering, which cover CBG USDA Priorities and NIFA Challenge areas such as food safety, water quality, global climate change and sustainable agriculture.

The Ph.D. program strengthens interdisciplinary approach by involving two colleges, more than eight departments and Research Excellence Centers at Tuskegee University, as well as offering courses and summer internships from collaborating universities and institutions such as USDA.

The project objectives are to (i) provide an innovative learning and teaching environment as a basis for research, outreach and development in agriculture, renewable energy, food science, environmental sciences; (ii) recruit highly talented students, focusing on African American and other under-represented minorities and (iii) advance diversity within the STEM workforce. The activities to be undertaken are: implementation of Ph.D. curricula through various interdisciplinary teaching activities, management and organization of the PhD program, recruitment and admission at national and international levels.

Expectations and measureable outcomes include the number of students enrolled, retained and graduated within program guidelines; the number of publications by students and faculty within the program, and internships with government agencies and private sector partners. External evaluations will be scheduled once a year during the second and third years of the project by partners like Purdue University.