

“Girls Go Green”- A Pre-College Summer Experience Focusing on Energy and the Environment

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Research has shown that female high school students are concerned about the environment and the impact they will have on it in the future. In the summer of 2008, the Missouri S&T Women’s Leadership Institute and the Geological Engineering program co-sponsored a new pilot pre-college summer program for rising junior and senior girls interested in learning more about careers in engineering and science that specifically address these energy conservation and environmental issues. Twenty female high school students (12 seniors and 8 juniors), participated in a week-long residential camp featuring hands-on demonstrations from the Geological Engineering, Electrical Engineering, Materials Engineering, and Nuclear Engineering programs. Several field trips were conducted including one to a hydroelectric dam and another to a renewable energy research site which featured a wind turbine and a photovoltaic array. At the end of the week, students gave presentations about energy- or environment-related topics that they had developed during the week. All 12 seniors have applied for admission to Missouri S&T beginning in Fall 2009, and 8 of the 12 have expressed interest in enrolling in energy and environmental degree programs. The inaugural experience of this program has led to plans for recruiting a larger number of participants in the summer of 2009. The pre-college program may be a small step to addressing two important national goals: 1) attracting more high school students, especially girls, to study engineering and science; and 2) providing formal studies in green issues for future professionals.