

2012-13 Strategic Plan Implementation Grants

To support the Tennessee Tech University (TTU) College of Engineering (COE) Strategic Plan--2020 Destination →Eminence proposals from faculty for new innovative projects that will lead to academic excellence, fiscal sustainability, enhanced enrollment management and/or a stronger sense of community were solicited. A sum of \$100 K was set aside to support this initiative. A request for proposals (RFP) was distributed. Two types of projects were solicited;

Type 1. Innovative Center/Program. A college Innovative Center (physical or virtual) or Innovative Program is one that will have positive college-wide and regional impacts. Innovative Centers and Innovative Programs must be multi-disciplinary team efforts and those that are likely to become self-sufficient. An Innovative Program is a large-scale academic effort that cuts across several academic degree programs, for example: common freshman year, common senior capstone design, entrepreneurship, service learning, etc. Centers and Programs are to be designed to address one or more Strategy Actions of 2020 Destination → Eminence. The Centers should also address the needs of the State, and will ultimately lead to external funding support and eventually self-supporting. Each award may be funded to a maximum of \$25,000 and length of one and half years. In addition to funds, space may be requested for the duration of the effort. Centers and Programs are also expected to include and impact several departments in the college and should include partners from other college(s)/division(s) and/or community. Centers and Projects must primarily address educating the 21st Century Renaissance Engineer (see strategic Plan for definition).

Type 2. Individual/Group Project. A new Project, submitted by an individual or group of individuals must address strategic plan priorities identified in the next section entitled "Strategic Plan Priorities". Total awards will range from \$2,500 to \$10,000 and the grant is limited to one year. Projects are expected to include and impact several departments in the college and may include partners from other TTU college(s)/division(s) and/or community. A project must primarily address educating the 21st Century Renaissance Engineer (see strategic plan for definition).

From the proposals received, the following two Type 1 projects and five Type 2 projects were selected:

Type 1 Projects selected for funding (\$25K per project)

1. Prof. Stephen Scott (CSC) – Center for Modeling, Simulation and Discovery
2. Prof. Benjamin Mohr (CEE) – The Engineering Specific Education Partnership Program

Type 2 Projects selected for funding (\$2.5K to \$10K per project)

1. Prof. Chris Wilson (ME) – First Year Engineering Math
2. Profs. Martha Kosa (CSC) & Ambareen Siraj (CSC) –The Rising Engineer Renaissance Spectrum Awards
3. Profs. Lenly Weathers (CEE) & Jie Cui (ME) – Boomerang Aerodynamics: A Hands on Project for Engineering Students
4. Prof. Faisal Hossain (CEE) – Prototyping a Smart Phone Application
5. Profs. Charles Carnal (ECE) & Pedro Arce (CHE)– Mobile Platform based PLC and Control Lab