AGENCY FLORIDA A&M UNIVERSITY
BUDGET ENTITY SUS
PROJECT TITLE Engineering Technology Building

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The Division of Engineering Technology is located at the Benjamin Banneker Complex. This complex consists of four buildings. The Division of Engineering Technology shares the Benjamin-Banneker Building Complex with the Computer Sciences Department of the College of Science of Technology (CST), the Department of Social Work within The College of Social Sciences, Arts and Humanities [CSSAH] and with of the departments of the College of Agriculture and Food Sciences (CAFS).

The Engineering Technology academic programs have outgrown the present facilities; and there is no room for expansion. Student enrollment in these areas are increasing rapidly because students are better informed regarding the areas of specialization which can guarantee more successful careers and better paying occupations. There is a continuing demand for STEM graduates both in the state and national level, and our graduates are highly recruited by the leaders of their respective industry. It is estimated that 80% to 90% of them receive employment with a salary range of $55k to $75k upon graduation or shortly thereafter.

The Benjamin Banneker Complex has out lived its usefulness as a facility which can offer today's students and faculty even the most basic amenities to be on the cutting edge of Engineering Technology exploratory research and development. These buildings are 53 years old (constructed in 1967) and the laboratory facilities limit the growth of the programs.

The new building for Engineering Technology is being proposed to house several technology programs now being offered namely the Electronics, Construction/Civil Engineering Technology programs in addition to other new programs. The new programs: Robotics and Mechatronics, Computer Engineering Technology, and Industrial Design Technology will require unique spaces for research, hands on laboratories, seminars, and exhibition spaces needed to accommodate expansion in these areas. To enhance the research effort there is a need for more space. ET does not have sufficient office and research laboratory space to support recent and anticipated faculty hires. The project will create a minimum of 4 Smart Classrooms, 2 teaching laboratories, 8 research laboratories and 15 faculty offices for ET. The new facility will also house needed ET advisement and academic support offices.

- Will it improve the national ranking of a specific college; e.g. Music, Business?

As mentioned earlier, CET and EET programs are the only ABET accredited B.S. degree programs in Florida's public university systems. They have a proven record of producing graduates who are highly pursued by the respective industries with the CET program being named as the number 1 Construction program among top 11 HBCUs in the nation. With this new building, it will definitely help the ranking of both programs assist in recruitment and graduating more qualified students in both areas.

- Will it allow for the creation of a new academic program?

CET program will start a "Construction Management and Engineering Technology" M.S. degree program in the Fall 2020. This degree program also has the potential to provide an EET option so that interested EET students can also obtain a M.S degree.

AGENCY FLORIDA A&M UNIVERSITY
BUDGET ENTITY SUS
PROJECT TITLE Engineering Technology Building

EET program is in the process of starting a new option in Mechatronics and Robotics field. The goal is to create a new ABET accredited B.S. degree program in the near future. With the new facility, it definitely will assist in achieving the above-mentioned goal.

- Will it create both new research capability and capacity; requiring material institutional support?

The new facility will help both programs to pursue external partnerships to develop both research and outreach capabilities. Traditionally both CET and EET have close relationship with College of Engineering (COE). A number of faculty and students came from COE, with the new facility this will assist in this synergy to grow, for example, the proposed new Mechatronics and Robotics option can benefit from the existing Center for Intelligent, Systems, Control, and Robotics (CISCOR) at the COE. EET can get help to build the mechatronics and robotics lab. We can do research in collaboration with CISCOR and pursue external funding together. The potential funding resource include private industries as well as government agencies, such as the Department of Education, the Department of Transportation, NASA, etc. As far as outreach effort. EET has involved in VEX robotics for some years. With the new facility, we will be able to offer workshops and open houses to local middle and high school teachers and students. Thus, we will be able to create a pipeline of students coming to EET program.
In addition, with the smart classes there will be an opportunity to provide courses online and also establish certificate courses and professional licenses in addition to what is currently being offered to increase the value of the students graduating from the program and also serve the North Florida community as a center for certifications for Engineering Technology skills.