Construction Engineering Technology (CET) Program

Educational Objectives

1. Graduates of our program will attain positions of responsibility within the various aspects of the construction industry.
2. Graduates of our program will have the necessary skills to avail themselves of the opportunities for lifelong learning and professional development.

Student Outcomes

a) An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;
b) An ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies;
c) An ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes;
d) An ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives;
e) An ability to function effectively as a member or leader on a technical team;
f) An ability to identify, analyze, and solve broadly-defined engineering technology problems

g) An ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature;
h) An understanding of the need for and an ability to engage in self-directed continuing professional development;
i) An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;
j) A knowledge of the impact of engineering technology solutions in a societal and global context; and
k) A commitment to quality, timeliness, and continuous improvement.

Program Criteria

1. utilize techniques that are appropriate to administer and evaluate construction contracts, documents, and codes;
2. estimate costs, estimate quantities, and evaluate materials for construction projects;
3. utilize measuring methods, hardware, and software that are appropriate for field, laboratory, and office processes related to construction;
4. apply fundamental computational methods and elementary analytical techniques in sub-disciplines related to construction engineering.
5. produce and utilize design, construction, and operations documents;
6. perform economic analyses and cost estimates related to design, construction, and maintenance of systems associated with construction engineering;
7. select appropriate construction materials and practices;
8. apply appropriate principles of construction management, law, and ethics, and;
9. perform standard analysis and design in at least one sub-discipline related to construction engineering.