

Associate Degree in Civil Engineering Technology in Construction

PROGRAM EDUCATIONAL OBJECTIVES	STUDENT OUTCOMES
<p><i>Program educational objectives are broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program's constituencies.</i></p>	<p><i>Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program.</i></p>
<ol style="list-style-type: none"> 1. Have the necessary technical and managerial skills to work in the construction industry in any of the following related fields: planning, architectural drafting, analysis and design of system components, cost estimate, material selection, construction, maintenance and operation of structures and infrastructure. 2. Be able to apply mathematic and scientific principles to resolve, manually and with the use of computer software, typical problems found in the field of construction technology. 3. Have the necessary skills to conduct standardized field and laboratory testing of civil engineering materials and soils, utilizing actualized equipment and technology. Will be able to analyze the results and prepare technical reports. 4. Be able to prepare construction plans using traditional drawing instruments and CAD software. Utilize and understand construction documents typically used in the industry. 	<ol style="list-style-type: none"> 1. Demonstrate knowledge regarding the equipment and the mathematics used in surveying jobs such as land measurement, leveling and construction layout. 2. Be able to apply mathematical and scientific principles to conduct computations and resolve technical problems typically found in the civil engineering technology field. 3. Demonstrate abilities to identify, formulate, and present creative solutions to a variety of technical problems found in the civil engineering technology field. 4. Be able to interpret construction plans and contract documents of construction projects. 5. Have the necessary skills to prepare and execute material testing using the equipment and actual technology. Will be able to analyze the results of such tests and prepare technical reports. 6. Be able to prepare construction cost estimates. 7. Be able to use modern computational equipment (hardware and software) to resolve technical problems. 8. Demonstrate general knowledge of contemporary diverse issues needed to develop ethical and professional responsibility. 9. Ability to function in work groups and communicate effectively. 10. Recognize the necessity of a continuous learning process. 11. Will be able to work as an assistant to engineers, architects, or surveyors in professional organizations.