

Associate Degree in Civil Engineering Technology in Architectural Drafting

PROGRAM EDUCATIONAL OBJECTIVES	STUDENT OUTCOMES
<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>	<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>
<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. 4. Will be able to analyze the results and prepare technical reports. 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. Produce architectural, engineering, construction documents and presentations, utilizing graphic techniques. 2. Conduct, analyze, and interpret results of standardized field and laboratory testing on civil engineering materials. 3. Use modern surveying equipment for land surveying and setting out points in the Field. 4. Determine forces and stresses in elementary structural systems. 5. Select materials and estimate quantities for technical projects 6. Employ productivity software to solve technical problems. 7. Apply knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge. 8. Function effectively as a member of a technical team. 9. Apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature. 10. Understand the need for an ability to engage in self-directed continuing professional development. 11. Understand and be committed to address professional and ethical responsibilities including a respect for diversity. 12. Develop a commitment to quality, timeliness, and continuous improvement.