Associate Degree in Industrial Engineering Technology

Program Educational Objectives (PEOs)
After completing the program, the graduate should be able to:

1. Recognize scientific and mathematical aspects and techniques that allow for the application of methods and skills in systems integration, using practical, analytical and computerized procedures.
2. Apply knowledge and skills in industrial safety systems, workstations and layout.
3. Evaluate equipment and documentation to determine which variables should be used in quality control systems, work measurement, production and costs.
4. Serve with a professional attitude to work individually and in teams, with graphics and communication skills. In addition to appreciate the contemporary social issues, the environment and ethics.

Student Outcomes (Graduating Student Profile)
Program graduates will be able to:

a. Apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.
b. Apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge.
c. Conduct standard tests and measurements, and to conduct, analyze, and interpret experiments.
d. Function effectively as a member of a technical team.
e. Identify, analyze, and solve narrowly defined engineering technology problems.
f. Apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature.
g. Understand the need for and an ability to engage in self-directed continuing professional development.
h. Understand of and a commitment to address professional and ethical responsibilities, including a respect for diversity.
i. Commit to quality, timeliness, and continuous improvement.
Associate Degree in Civil Engineering Technology

Program Educational Objectives (PEOs)
After completing the program, the graduate should be able to assist civil engineers in the following duties:

1. Structural design of steel and concrete structures.
3. Quantity take-off and cost estimates in construction projects.
4. Inspection and quality control tasks in construction projects.
5. Construction materials tests.

Student Outcomes (Graduating Student Profile)
Program graduates will be able to:

a. Apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.
b. Apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge.
c. Conduct standard tests and measurements, and to conduct, analyze, and interpret experiments.
d. Function effectively as a member of a technical team.
e. Identify, analyze, and solve narrowly defined engineering technology problems.
f. Apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature regarding control systems technical details using modern techniques and graphical standards.
g. Understand the need for and an ability to engage in self-directed continuing professional development.
h. Understand of and a commitment to address professional and ethical responsibilities, including a respect for diversity.
i. Commit to quality, timeliness, and continuous improvement.
University of Puerto Rico at Bayamon
Dean of Academic Affairs
Engineering and Engineering Technology Department

Associate Degree in Construction, Surveying and Highway Engineering Technology

Program Educational Objectives (PEOs)
After completing the program, the graduate should be able to assist civil engineers in the following duties:

1. Route study and layout design.
2. Land surveying and segregation.
3. Soil and materials tests.
4. Inspection and quality control tasks in projects.

Student Outcomes (Graduating Student Profile)
Program graduates will be able to:

a. Apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.

b. Apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge.

c. Conduct standard tests and measurements, and to conduct, analyze, and interpret experiments.

d. Function effectively as a member of a technical team.

e. Identify, analyze, and solve narrowly defined engineering technology problems.

f. Apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature regarding control systems technical details using modern techniques and graphical standards.

h. Understand the need for and an ability to engage in self-directed continuing professional development.

i. Understand of and a commitment to address professional and ethical responsibilities, including a respect for diversity.

j. Commit to quality, timeliness, and continuous improvement.