The Civil Engineering Technology program at NWTC is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org.

Program Educational Objectives- Graduates will…

- be technically competent and able to solve civil engineering technology problems using basic principles of mathematics, science and engineering technology

- be able to communicate effectively, both orally and in writing, using electronic tools and graphical representations

- be effective team members

- respect and appreciate diversity and professional behavior in engineering

- recognize the value of lifelong learning and engage in professional growth

Student Outcomes:

- Students will utilize CAD and sketching techniques to produce engineering documents.

- Students will be capable to perform basic design and routine testing procedures related to construction material. These materials include soils, Portland cement concrete and hot mix asphalt

- Students will utilize the legal aspects of land surveying and use land surveying instruments to collect data necessary to produce topographic maps, establish horizontal and vertical control, and to lay out civil engineering projects.

- Students will be able to recognize and calculate forces and stresses in elementary structural systems.

- Students will estimate material quantities for construction projects.

- Students will be able to solve technical problems by utilizing operating systems, spreadsheets, word processing, CAD, and other software products.

- Students will be able to apply the basic elements of design to projects such as materials mixtures, roads, subdivision layout, and storm and sanitary sewer systems.

- Students will be able to solve engineering, surveying, and materials testing problems using principles of mathematics, science, engineering and technology.

- Students will be able to conduct, analyze, interpret, or apply results of test data related to science or civil engineering materials.

- Students will have the ability to function effectively on teams.

- Students will develop problem solving capabilities.

- Students will be able to communicate effectively by producing written and oral reports.

- Students will recognize the need to continue professional development by engaging in lifelong learning.

- Students will exhibit behavior that appropriately reflects professional, ethical and social responsibilities.

- Students will have respect for race, ethnic and diversity issues.

- Students will have a commitment to quality, timelines and continuous improvement.