

Engineering

Associate in Engineering



VS



Engineering Technology

Associate in Applied Science in Mechanical, Electrical, or Mechatronics

Analyze Problems



Provide Solutions to Technical Problems

Plan Solutions



Practical Application Using Your Hands

Apply Engineering Theories



Assist in Design

Apply Calculus



Apply Algebra and Trigonometry

Obtain an AE Degree from Mitchell Community College



Enter Workforce After Earning Your AAS Degree

Transfer to Earn a Bachelor's Degree in Engineering



Be Eligible for Professional Engineer (PE) License

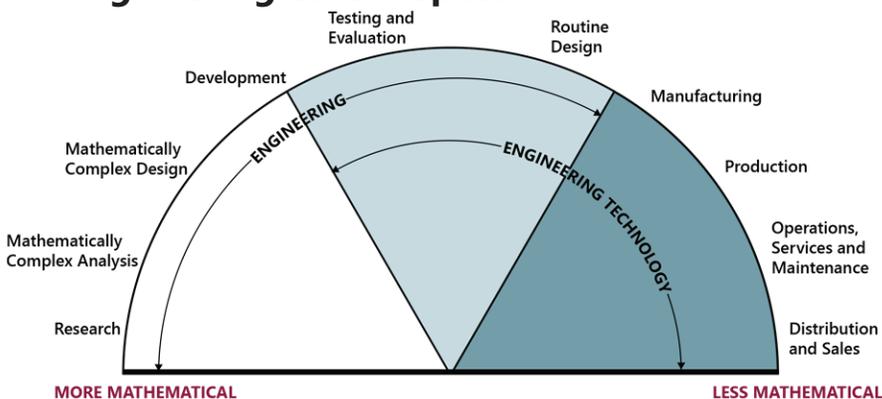


Engineering Technology Programs:

- Mechanical
- Electrical
- Mechatronics
- Fire Safety

Earning an Associate in Engineering Degree from Mitchell can lead to a career in any field of engineering, and is accepted by the five UNC engineering colleges.

The Engineering Career Spectrum



Mitchell
COMMUNITY COLLEGE

mitchellcc.edu

Equal Opportunity College



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Engineering vs. Engineering Technology

Often, prospective students and parents ask what is Engineering Technology (ET). The following discussion is a compilation of the work of many individuals and organizations and may help to answer that question.

Mitchell offers three concentrations of the Associate of Applied Science in Engineering Technology program: Mechanical, Electronics and Mechatronics Engineering Technology. These programs are all applications-oriented programs, providing career educational opportunities to students whose interests and aptitudes align with applied science and applications of engineering and technology.

Coursework in engineering technology programs includes algebra, trigonometry, applied calculus and college level sciences; the level of math is not as in-depth as traditional engineering programs and focuses on applications in the engineering disciplines. Engineering Technology provides an educational background that is rich in real-world applications. Emphasis is placed on applying current knowledge and practices to the solution of specific technical problems and standard design practices.

An Engineering Technology graduate is an implementer. She/he enjoys a career where the emphasis is on implementing, constructing, producing, installing, maintaining, and operating systems. Graduates of Engineering Technology programs can enter all sectors of industry, government, and business in product design / development, testing, technical operations, or technical services and sales. Or transfer on to pursue higher level Engineering Technology degrees. Graduates often get a "hands on" laboratory, testing, operations, construction, or "in-the-field" job.

Often, people ask what is the difference between Engineering Technology and Engineering. Both Engineering Technology and Engineering are challenging programs; however, there are significant differences between the two programs. One size does not fit all as some students are attracted to engineering technology while others pursue engineering depending on their academic preparation and career interests. The following table highlights some of those differences. For more detailed information, visit the comparison discussion on our website.

ENGINEERING TECHNOLOGY— AAS MECHANICAL, ELECTRICAL OR MECHATRONICS	ENGINEERING—ASSOCIATE IN ENGINEERING (AE)
An engineering technology (ET) graduate is an implementer.	An AE graduate is an innovator.
Emphasis of curriculum is on applying current knowledge and practices to the solution of specific technical problems and standard design problems.	Emphasis of curriculum is on developing new methods of analysis and solutions for open-ended, complex and unique design problems.
Coursework includes algebra, trigonometry, applied calculus and college level sciences; level of math is not as in-depth as engineering programs while focusing on applications of the engineering disciplines	Coursework includes multiple semesters of calculus and calculus-based theoretical college level science courses.
More likely to get a 'hands-on' laboratory, testing, technical operations, or in-the-field job.	More likely to get a research, development, or design job.
Can transfer on to pursue higher levels of ET programs at NC Universities or enter workforce.	Designed to transfer into Baccalaureate disciplines of Engineering at NC Universities.