



Mechanical Engineering Technology - 2+2 Academic Plan of Study

The Mechanical Engineering Technology 2+2 Program is for students who have completed an Associates of Applied Science (AAS) degree in a related field prior to enrolling at UNC Charlotte. Students in the 2+2 program must complete all Prerequisite Courses either at their prior institution or within their first year at UNC Charlotte. In addition, the student must complete the 60 credit hour Upper division curriculum.

Transfer Students

Students may transfer into the Engineering Technology and Construction Management programs at UNC Charlotte in one of two ways:

Matriculate as Transfer without AAS degree from Community or Technical College

Students may transfer to the B.S.E.T. or B.S.C.M. program after achieving the minimum university transfer requirements. All requirements for the B.S.E.T. or B.S.C.M. are met at UNC Charlotte as defined by the respective program curriculum.

Transfer Student Program Evaluation and Advisement.

Each transfer student who enters the program comes in with a unique set of completed coursework. Consequently, each student who enters the program is beset by a different set of constraints. Starting with the 1995-1996 academic year, a new program of transfer advising has been implemented by the Engineering Technology faculty. This new method is designed to specifically address the uniqueness of each student and the different constraints presented by that uniqueness.

In order to provide transfer students with a smooth transfer and matriculation experience, a personal and unique program of study is prepared for each entering student. A comparison between the student's completed coursework and the anticipated Baccalaureate program is made, and a list of courses required for degree completion is generated. Each student is personally interviewed prior to registration for the Spring semester of their junior year. At that interview the student's program of study is prepared and presented. As each program of study is prepared, the following list of constraints must be addressed:

- The transfer requirements
- The upper-division program requirements presented in the college catalog, or the latest departmental revision of that catalog copy.
- Departmental General Education requirements in effect at time of enrollment.

- Programmatic foreign language requirements in effect at time of enrollment.
- Program requirements necessary to maintain accreditation by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.
- The 128 semester hour limitation stipulated by the UNC system administration.

2+2 Programs

Matriculate as Transfer Student with AAS degree from Community or Technical College

Each of the programs offered by the Department of Engineering Technology can be accessed as the second half of a "2+2" arrangement. That is, students may complete the first two years of the program by completing an approved A.A.S. degree in a related field at a community or technical college. Upon completion of the AAS, a student then matriculates to UNC Charlotte to complete their Junior and Senior years of study. See detailed description below.

AAS Transfer Program Structure

All transfer students with an approved AAS degree are given 64 semester hours of transfer credit when proof of the A.A.S. degree is presented. Transfer deficiencies, if applicable, are identified courses which are required for entrance into the program. Common deficiencies are in the areas of math, physics and computer programming. Students are allowed to enter the program with as many as three course deficiencies. However, the student is responsible for correcting these deficiencies by taking the appropriate coursework at either UNC Charlotte or at a community or technical college. Courses taken at UNC Charlotte to remediate deficiencies cannot be used towards the upper-division credit requirements of the program.

Table 1 is a list of courses required for entrance into the Engineering Technology programs at UNC Charlotte. Required transfer credits are listed in both quarter hours and semester hours.

	Semester Credit Hours
English Composition, Technical Writing and/or Public Speaking	6
Algebra and Trigonometry	3-6
Differential and Integral Calculus	6
General Physics (with Laboratory)	4
Physics or Chemistry (with Laboratory) or (Geology for Civil ET)	4
Social Science	3
Technical Courses in Major Area as listed below (up to 38 hours)	Balance of credits
Maximum Transfer Credit from two-year college is 64 semester hours or 96 quarter hours	64

*The technical course prerequisites of major work must include courses covering the subjects in the areas shown below.

Electrical

- D.C. Circuits (with lab)
- A.C. Circuits (with lab)
- Circuit Simulation
- Digital Circuits (with lab)
- Electronic Devices (with lab)
- Power Systems and Machinery
- Microprocessors
- Instrumentation or PLCs (with lab)
- C Programming

Mechanical

- Drafting / CAD (Computer Aided Drafting)
- Manufacturing Processes
- Statics
- Engineering Materials or Metallurgy
- Kinematics or Mechanisms
- Basic Electrical Circuits
- Programming (using a higher level language)
- Machine Shop Practices