Engineering vs. Engineering Technology

Though the two fields are similar, engineering and engineering technology are not the same. Engineers and engineering technologists receive distinct educational training and thus are prepared for different careers. The engineer is equipped for creative design work because of the arduous, theory-based curricula built upon mathematics, physics, and chemistry. In contrast, the engineering technologist is equipped to solve specific technical problems because of the applications-based curricula.

The University of Wisconsin-Platteville offers the following seven ABET-accredited, baccalaureate engineering programs:

- Civil engineering
- Electrical engineering*
- Engineering physics
- Environmental engineering
- Industrial engineering
- Mechanical engineering*
- Software engineering

*Also available through UW-Platteville Collaborative Engineering

One of the trademarks of the engineering programs at UW-Platteville is the “hands-on” approach which is integrated into the robust, conceptual-based curricula. The sequence of engineering analysis and design courses coupled with social sciences and humanities classes provide a well-rounded education to the students. As new employees, they are prepared to perform a myriad of engineering functions as they “hit the ground running.”

### Engineering Degree

- Pursued by innovators and developers
- Conceptually based
- Curricula is calculus based
- Learn via mathematical analysis of theories
- Emphasis is on developing methods of analysis and solutions for open-ended design problems
- Transfer to an engineering technology program from an engineering curriculum is possible with a minimum loss of credits and time
- Bachelor of Science (four years)
- Graduates are referred to as engineers

### Engineering Technology Degree

- Pursued by doers and implementers
- Applications based
- Curricula integrates math and sciences as needed
- Learn by applying theories, hands-on approach
- Emphasis is on applying current knowledge and practices to the solution of specific technical problems
- Transfer to an engineering program from an engineering technology curriculum is generally not possible without a significant loss of credits and time
- Associate (two years) or Bachelor (four years)
- Graduates are referred to as engineering technicians, junior engineers, or engineering assistants from Associate Programs;
- Graduates are referred to as engineering technologists or, on occasion, engineers from Baccalaureate Programs
- Graduates are relatively specialized and have an applications orientation challenged by specific technical problems
- As a new employee, the engineering technician or engineering technologist is prepared to begin technical assignments immediately since engineering technology programs stress current practices and design procedures

Graduates are relatively broad and have an analytical, creative mind challenged by open-ended technical problems
- As a new employee, a period of assimilation is required since engineering programs stress fundamentals