Become a Technologist: Students earning their bachelor’s degree in Engineering Technology are called Technologists. They are specialists dedicated to the development, design, and implementation of engineering and technology. These professionals are most likely to enter positions in sectors such as construction, manufacturing, product design, testing, or technical services and sales. Engineering Technologists often work independently or with traditional engineers applying learned engineering principles and technical skills. They may assume senior management positions in industry or become entrepreneurs.

Hand-On Learning: If you are a “hands-on” type of individual, someone who may have taken small engines, or machine shop in high school, who likes tinkering on their snowmobile or ATV on the weekend, then Engineering Technology is perfect for you! Engineering Technology students learn more through hands-on training as opposed to theory alone. They spend an extensive amount of time in the College of Technology, Art & Design’s thirteen labs where they focus on analyzing, applying, implementing and improving products and technologies.

Entry Level Positions: Product design, testing, product development, systems development, field engineering, technical operations, and quality control are all common positions for engineering technology graduates.

Difference between Engineering Technology and Engineering
Engineering Technology deals with the same topics as engineering, but the knowledge is more applied, as opposed to theoretical knowledge. Engineering Technology focuses on algebra, trigonometry, applied calculus, and other courses that are more practical than theoretical in nature. Engineering programs require advanced-level math and calculus as well as theory-based science courses. Once they enter the workforce, engineering graduates typically spend their time planning, while Engineering Technology graduates spend their time making plans work.

For more information, contact:
Michael Lund
Mlund@bemidjistate.edu
(218) 755-2951
Engineering Technology

BACHELOR OF SCIENCE

I. TADT Common Core - 18 Credits
   TADT 1111 Introduction to Project Management (3 credits)
   TADT 3267 Economic and Cost Analysis (3 credits)
   TADT 3970 Internship (1 credit)
   TADT 4385 Sustainability and Emerging Technologies (3 credits)
   TADT 4873 Emphasis Related Capstone (3 credits)
   TADT 4878 Quality Assurance (3 credits)
   TADT 4970 Internship (2 credits)

II. Engineering Technology Core - 54 Credits
   MATH 1470 Precalculus (5 credits)
   PHYS 1101 General Physics I (4 credits)
   PHYS 1102 General Physics II (4 credits)
   TADT 1210 Introduction to Manufacturing Processes I (3 credits)
   TADT 1220 Introduction to Manufacturing Processes II (3 credits)
   TADT 1460 2D Graphics And Laser Etching (3 credits)
   TADT 1464 Engineering Technology Project I (3 credits)
   TADT 2100 Impact Of Technology (2 credits)
   TADT 2217 Strength of Materials (3 credits)
   TADT 2461 Parametric 3D Modeling (3 credits)
   TADT 2465 Engineering Technology Project II (3 credits)
   TADT 2877 Engineering Problem Solving (3 credits)
   TADT 3217 Materials Science and Metallurgy (3 credits)
   TADT 3277 Programmable Logic Controllers (3 credits)
   TADT 3462 Computer Controlled Machining (3 credits)
   TADT 3537 Industrial Design/Innovation (3 credits)
   TADT 4778 Advanced Topics in Technology (3 credits)

III. Required Foundation Courses, Select 7 Credits from the Following - 7 Credits
   TADD 3440 3D Design Software (4 credits)
   TADD 3450 History of Modern Design (4 credits)
   TADD 3579 Branding and Packaging (4 credits)
   TADT 3250 Print Reading and Project Documentation (3 credits)
   TADT 4589 Advanced Prototype Project (3 credits)
   TADT 4880 Total Quality Management (3 credits)

Total Semester Credits for Major - 79 Credits

Bachelor of Science Degree Summary
   Common Core - 18 Credits
   Engineering Technology Core - 54 Credits
   Engineering Technology Electives - 7 Credits
   Additional Liberal Education Requirements - 41 Credits
   Degree Total - 120 Credits

Career Paths and Income
   Applications Engineering
   Field Engineer
   Industrial Engineering
   Manufacturing Engineering
   Quality Control Engineering
   Research and Development
   Safety Engineer
   Technical Sales

High School Course Recommendations
   - Drafting
   - Production
   - Construction
   - Manufacturing
   - Electronics
   - Robotics
   - CADD
   - Project Lead the Way Classes
   - 360 eTech Classes

Median Income
   Field Engineer // $62,000
   Industrial Manager // $63,000
   Applications Engineer // $66,000
   Engineer // $72,000
(Median Income, www.payscale.com or U.S. Dept. of Labor)

A member of the Minnesota State Colleges and Universities system, Bemidji State University is an equal opportunity educator and employer.