Lead Industry: It is estimated that in the next decade, nearly 3½ million manufacturing jobs will be needed. Many of these jobs will be in highly-skilled production positions or management. Do you have the training, skills, and advanced degree needed to become a leader in industry? If not, a Bachelor’s degree in Applied Engineering from Bemidji State University will help ensure your position in this rapidly growing field.

Finish in 2 Years: This transfer-friendly program is designed specifically for people with a two-year technical degree who wish to advance their professional career. The program permits most students to apply up to 38 technical credits and their liberal education credits toward the Applied Engineering degree. This allows most students to complete an Applied Engineering degree in about two years.

Online Flexibility: A bachelor’s degree will help you get promoted. We know you cannot always quit your current job and go to college. You have bills, a home, and a family to consider. That’s why we created Applied Engineering as an online degree program. The flexibility of the Applied Engineering allows you to continue working while you pursue you’re a degree. You earn while you learn!

Graduate with Confidence: To ensure we are providing students with skills needed to succeed in industry, Applied Engineering courses are regularly reviewed by an Industry Advisory Board. The classes you receive in Project Management, Economic and Cost Analysis, Quality Assurance, Safety and Risk Management, Materials Science, Lean Principles and Operations Planning ensure your place in the future of this ever-expanding industry.

For more information, contact:
Lyle Meulebroeck
LMeulebroeck@bemidjistate.edu
(218) 755-2733
I. TADT Common Core - 15 Credits
   TADT 3111 Project Management Methodology (3 credits)
   TADT 3267 Economic and Cost Analysis (3 credits)
   TADT 4385 Sustainability & Emerging Technologies (3 credits)
   TADT 4873 Emphasis Related Capstone (3 credits)
   TADT 4878 Quality Assurance (3 credits)

II. Applied Engineering Core - 15 Credits
    TADT 3100 Principles of Professional Development (3 credits)
    TADT 3217 Material Science and Metallurgy (3 credits)
    TADT 3537 Industrial Design and Innovation (3 credits)
    TADT 3700 Operations Planning and Control (3 credits)
    TADT 3887 Safety and Risk Management (3 credits)
    TADT 4867 Lean Principles and Practices (3 credits)
    TADT 4879 Services Process/Improvement (3 credits)

III. Transfer Technical Block - 38 Credits
     Requires 38 technical credits transferred from an A.S. or A.A.S. degree, or a diploma (e.g., Manufacturing Technology, Automation Technology)

IV. Required TADT Electives - 4 Credits
    Select 4 Credits of Upper Division (3000/4000) TADT Electives with Advisor Approval.

Suggested Schedule, Applied Engineering Major, B.A.S.

Freshman Year
   TADT 3100 Principles of Professional Development (3 credits)
   TADT 3267 Economic and Cost Analysis (3 credits)
   TADT 3111 Project Management Methodology (3 credits)
   TADT 3700 Operations Planning and Control (3 credits)
   Liberal Education Requirements

Sophomore Year
   TADT 3217 Material Science and Metallurgy (3 credits)
   TADT 3537 Industrial Design and Innovation (3 credits)
   TADT 3887 Safety and Risk Management (3 credits)
   TADT 4385 Sustainability & Emerging Technologies (3 credits)
   Liberal Education Requirements

Junior Year
   TADT 4867 Lean Principles and Practices (3 credits)
   TADT 4879 Services Process/Improvement (3 credits)
   Upper Division TADT Elective with Advisor Approval
   Liberal Education Requirements

Senior Year
   TADT 4873 Emphasis Related Capstone (3 credits)
   TADT 4878 Quality Assurance (3 credits)
   Liberal Education Requirements

Career Paths and Income
Production Control Manager // $92,264
Industrial Engineer // $83,470
Product Engineer // $69,000
Process Engineer // $71,000
Safety Engineer // $72,000
Sales Engineer // $97,650
(Median Income, www.payscale.com or U.S. Dept. of Labor)

High School Course Recommendations
- Advanced Placement Classes
- Project Lead the Way
- Management Classes
- Leadership Classes
- Algebra
- Industrial Technology

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