

Applied Engineering Bachelor of Applied Science







School of Technology, Art and Design



The Applied Engineering Program is designed to prepare individuals to work in a variety of applied engineering career paths in business or industry including: manufacturing, construction, transportation, healthcare, printing/publishing and distribution. The program is designed specifically for individuals who typically possess a two-year technical degree and are interested in advancing their professional career.

The program permits students to apply their 2 year technical degree credits toward a baccalaureate degree. Students will complete junior- and senior-level courses covering a broad range of applied engineering concepts and applications. This breadth will provide maximum flexibility for graduates to pursue diverse employment opportunities.

Completion of the degree is available through a webbased distance delivery format. Students should work closely with an advisor to obtain program and course selection information.

Note: Transfer students must take a minimum of 30 semester credits from Bemidji State University. Forty (40) upper division semester credits are also required for graduation. For information, contact:

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I. TADT COMMON CORE 15 credits

TADT 3111 Project Management Methodology (3 credits)
TADT 3267 Economic and Cost Analysis (3 credits)
TADT 4385 Sustainability and Emerging Technologies (3 credits)
TADT 4873 Emphasis Related Capstone (3 credits)
TADT 4878 Quality Assurance (3 credits)

II. APPLIED ENGINEERING CORE 21 credits

TADT 3100 Principles of Professional Development (3 credits)
TADT 3217 Material Science and Metallurgy (3credits)
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. SELECT 4 CREDITS OF UPPER DIVISION TADT ELECTIVES WITH APPROVAL FROM ADVISOR.

IV. TRANSFER PROFESSIONAL BLOCK 38 credits

Technical credits transferred from an A.S. or A.A.S. degree, or a diploma (e.g., Manufacturing Technology, Automation Technology)

Bachelor of Science Degree Summary

Required Common Core: 15 Credits Required Applied Engineering Core: 21 Credits Upper Division TADT Electives: 4 Credits Transfer Professional Block: 38 Credits Liberal Education: Min 42 Credits

Career Paths/Income

Applications Engineer/ \$66,000 Process Engineer/ \$71,000 Product Engineer/ \$69,000 Safety Engineer/ \$72,000 Sales Engineer/ \$71,000 (Median Income, www.payscale.com)

High School Course <u>Recommendations</u>

Project Lead the Way 360 eTech Courses CAD/Drafting College Prep Math & Science Industrial Technology Electronics Machine Tool Technology

