In 1902 3M began with just one product. Today they are responsible for 60,000 products. Yet, one third of 3M’s sales come from products invented in the past five years. To grow, companies need to introduce new products, and they need product developers like you to build that first one.

**Hand’s-On Learning:** Unlike most universities, where you sit in classrooms and listen to theoretical lectures, BSU students in Product Development learn through a hands-on approach. You will spend an extensive amount of time in the department’s thirteen Technology and Design labs. These labs provide you the latest in 3D printing, material testing, laser engraving, CNC machining, dry processing, injection molding, and even virtual and augmented reality.

**Experience STEAM:** Until recently industry leaders promoted the concept of Science, Technology, Engineering and Math (STEM). Only recently did they realize the importance of adding Art to create STEAM. This is especially true when it comes to Product Development. Art, imagination, and technology go hand in hand to create aesthetically pleasing products. Nowhere else will you experience this more than in BSU’s School of Technology, Art, and Design. When it comes to Product Development, we understand what it takes to stand out from the crowd!

**One Degree, Three Emphasis:** Students coming into the Product Development emphasis of Project Management take the same core courses as students in the Operations Management and Construction and Facility Management emphasis. So, if you decide you want to add another area of emphasis, or possibly switch areas, program flexibility makes this easier than ever. You decide the emphasis, we’ll help you get there!

For more information, contact:
Lyle Meulebroeck
LMeulebroeck@bemidjistate.edu
(218) 755-2733

Learn More at
www.bsutad.com
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 & Emerging Technologies (3 credits)
   - TADT 4873 Emphasis Related Capstone (3 credits)
   - TADT 4878 Quality Assurance (3 credits)
   - TADT 4970 Internship (2 credits)

II. **Project Management Core - 27 Credits**
   - ACCT 1101 Principles of Accounting I (3 credits)
   - BUAD 2220 Legal Environment (3 credits)
   - BUAD 2280 Computer Business Applications (3 credits)
   - TADT 1460 2D Graphics And Laser Etching (3 credits)
   - TADT 2877 Engineering Problem Solving (3 credits)
   - TADT 3112 Leadership in a Team Environment (3 credits)
   - TADT 3885 Technical Sales, Service and Training (3 credits)
   - TADT 4875 Facilities Management (3 credits)
   - TADT 4893 Applied Project Management (3 credits)

III. **Select One of Three Emphases:**
   - **Construction and Facility Management - 27 Credits**
     - BUAD 3677 Principles of Real Estate (3 credits)
     - TADT 1210 Introduction to Manufacturing Processes I (3 credits)
     - TADT 1220 Introduction to Manufacturing Processes II (3 credits)
     - TADT 2250 Built Environment (3 credits)
     - TADT 2252 Construction Materials and Methods (3 credits)
     - TADT 3250 Print Reading and Project Documentation (3 credits)
     - TADT 3260 Project Bidding and Estimating (3 credits)
     - TADT 3887 Safety and Risk Management (3 credits)
     - TADT 4259 Construction Management (3 credits)
   - **Product Development - 27 Credits**
     - TADT 1210 Introduction to Manufacturing Processes I (3 credits)
     - TADT 1220 Introduction to Manufacturing Processes II (3 credits)
     - TADT 1450 Introduction to Product Development (3 credits)
     - TADT 2450 Product Finishing & Aesthetics (3 credits)
     - TADT 2461 Parametric 3D Modeling (3 credits)
     - TADT 3462 Computer Controlled Machining (3 credits)
     - TADT 3470 Concept to Prototype Model (3 credits)
     - TADT 3537 Industrial Design/Innovation (3 credits)
     - TADT 4589 Advanced Prototype Project (3 credits)
   - **Operations Management - 27 Credits**
     - TADT 1210 Introduction to Manufacturing Processes I (3 credits)
     - TADT 1220 Introduction to Manufacturing Processes II (3 credits)
     - TADT 2461 Parametric 3D Modeling (3 credits)
     - TADT 3100 Principles of Professional Development (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 Service Process/Improvement (3 credits)
     - TADT 4880 Total Quality Management (3 credits)

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**Career Paths and Income**

Product Development Manager // $109,000
Project Manager // $70,000
Prototype Engineer // $67,130
Model Maker // $58,240
Industrial Designer // $67,130
(Median Income, www.payscale.com or U.S. Dept. of Labor)

**High School Course Recommendations**
- All Advance Placement Classes
- Project Lead the Way
- Industrial Technology
- Art or Graphic Design
- Management Classes
- Leadership Classes