

**1. Name.**

Danny J. Bee

**2. Administrative rank.**

Associate Dean of Integrated Technologies, Western Technical College, 2012

Associate Dean for Sustainability, Western Technical College, 2010

Department Chair, Engineering & Technology Department, University of Wisconsin-Stout, 2008

**3. Academic rank.**

Assistant Professor, University of Wisconsin-Stout, 2018, tenured 2022

Professor of Practice, Lecturer, University of Wisconsin-Stout, 2017

Assistant Professor, University of Wisconsin-Stout, 1995, tenured 2001

**3. Degrees with fields, institutions, and dates.**

M.S. in Manufacturing Systems Engineering, Engineering Management  
Specialization, University of Wisconsin-Madison 1992

B.S. in Mechanical Engineering, University of Wisconsin-Madison 1988

Ed.S. Student, Career and Technical Education, University of Wisconsin-Stout  
2010 through 2015

Ph.D. Student, Mechanical Engineering, Michigan Technological University  
2004 through 2010  
12 credits course work complete  
16 credits doctoral research complete

**4. Number of service years as instructional faculty.**

23.0 years; August 1995-tenured July 2001, August 2017 (lecturer), August 2018-tenured July 2020,  
University of Wisconsin-Stout

**5. Number of service years as administration.**

5.0 years, August 2010, Western Technical College

2.5 years, June 2008, University of Wisconsin-Stout

**5. Other related experience: teaching, industrial, etc.**

Advantek, Engineering and Quality Manager  
*Eau Claire, WI* Aug 2015 – Jul 2017

Blackhawk Technical College, Continuing Education Division, Quality Specialist  
*Janesville, WI* Oct 1994 – Aug 1995

International Business Machines (IBM), AS/400 Division, Process Engineer  
*Rochester, MN* Jan 1992 – Oct 1994

University of Wisconsin-Madison, Mechanical Engineering Department, Head Teaching Assistant  
*Madison, WI* Aug 1990 – Dec 1991

Procter & Gamble Paper Products Company, Process Engineer  
*Green Bay, WI* Summer 1991

Boeing Company, Liaison (Design) Engineer  
*Wichita, KS* Mar 1990 – Aug 1990

McDonnell Aircraft Company, McDonnell Douglas Corporation, Liaison (Design) Engineer  
*St. Louis, MO* Jun 1988 – Mar 1990

## 6. Curriculum development and instruction, University of Wisconsin-Stout.

### Spring 2025 Instruction

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 6 hours lecture and project lab  
 (co-facilitated with ME-405, up to 30 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated  
 with ME-410, up to 69 students combined)

ETECH-403, *Ethical Decision Making in Engineering*, 1 credit, 1 section, 2 hours lecture

### Fall 2024 Instruction

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 6 hours lecture and project lab  
 (co-facilitated with ME-405, up to 79 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated  
 with ME-410, up to 69 students combined)

MFGE-351, *Manufacturing Processes Engineering I*, 3 credits, 1 section, 4 hours lecture and laboratory

### Spring 2024 Instruction

SUST-315, *Sustainable Engineering*, 3 credits, 1 Section, 3 hours lecture

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 6 hours lecture and project lab  
 (co-facilitated with ME-405, up to 30 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated  
 with ME-410, up to 69 students combined)

### Fall 2023 Instruction

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 6 hours lecture and project lab  
 (co-facilitated with ME-405, up to 30 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated  
 with ME-410, up to 69 students combined)

### Spring 2023 Instruction

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 6 hours lecture and project lab  
 (co-facilitated with ME-405, up to 30 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated  
 with ME-410, up to 69 students combined)

### Fall 2022 Instruction

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 6 hours lecture and project lab  
 (co-facilitated with ME-405, up to 30 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated  
 with ME-410, up to 69 students combined)

MFGE-351, *Manufacturing Processes Engineering I*, 3 credits, 1 section, 4 hours lecture and laboratory

MFGE-440, *Manufacturing Systems Design and Simulation*, 3 credits, 1 section, 4 hours lecture and laboratory

Spring 2022 Instruction

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 6 hours lecture and project lab  
(co-facilitated with ME-405, up to 30 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated with ME-410, up to 69 students combined)

Fall 2021 Instruction

ET-291, *Strength of Materials*, 3 credits, 1 section, 4 hours lecture and 2 hours laboratory

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 4 hours lecture and project lab  
(co-facilitated with ME-405, up to 69 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated with ME-410, up to 45 students combined)

Spring 2021 Instruction

SUST-315, *Sustainable Engineering*, 3 credits, 1 Section, 3 hours lecture

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated with ME-410, up to 45 students combined)

Fall 2020 Instruction

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 4 hours lecture and project lab  
(co-facilitated with ET-405 and ME-405, up to 85 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated with ME-410, up to 40 students combined)

Spring 2020, Fall 2019, Fall 2018, and Spring 2018 Instruction

ENGR-294, *Mechanics of Materials*, 3 credits, 1 section (Fall '19), 1 section (Fall '18), 2 sections (Spring '18), 4 hours lecture and 2 hours laboratory

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 4 hours lecture and project lab  
(co-facilitated with ET-405 and ME-405, up to 70 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated with ME-410, up to 40 students combined)

Spring 2019 Instruction

SUST-315, *Sustainable Engineering*, 3 credits, 1 Section, 3 hours lecture

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 4 hours lecture and project lab  
(co-facilitated with ET-405 and ME-405, up to 70 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated with ME-410, up to 40 students combined)

Fall 2017 Instruction

ENGR-294, *Mechanics of Materials*, 3 credits, 2 sections, 4 hours lecture and 2 hours laboratory

MFGE-405, *Capstone I: Concurrent Design*, 3 credits, 1 section, 4 hours lecture and project lab  
(co-facilitated with ET-405 and ME-405, up to 70 students combined)

MFGE-410, *Capstone II: Manufacturing Systems Design*, 3 credits, 1 section, 4 hours lecture and project lab (co-facilitated with ME-410, up to 40 students combined)

ETECH-100, *Impacts of Engineering*, 1 lab section

Summer 2017 Instruction

ENGR-275, *Thermodynamics and Heat Transfer*, 3 credits, 1 section, hybrid course of combined online and weekend face-to-face meetings in Green Bay, WI (for the MFGE Cohort at NTC)

Spring 2016 Instruction

SUST-425, *Sustainable Design and Development Capstone*, 3 credits, 1 section, 4 hours lecture and project lab

Spring 2010 Development

SUST-425, *Sustainable Design and Development Capstone*, for Fall 2010 offering

Spring 2010 Instruction

SUST-315\*, *Sustainable Engineering*, 3 credits, 1 Section, 3 hours lecture

Fall 2009 Instruction

MFGE-440, *Manufacturing Systems Design and Simulation*, 3 credits, 1 section, 4 hours lecture and laboratory

Summer 2008 Instruction

MFGE-640, *Manufacturing Systems Design and Simulation*, 3 credits, 1 section, online distance course for M.S. in Manufacturing Engineering Program

Spring 2008 Instruction

SUST-730\*, *Sustainable Futures*, 3 credits, 1 section, online distance course for M.S. in Manufacturing Engineering Program  
MFGE-440, *Manufacturing Systems Design and Simulation*, 3 credits, 1 section, 4 hours lecture and laboratory

Fall 2007 Instruction

MFGE-351\*, *Manufacturing Processes Engineering I*, 3 credits, 1 section, 4 hours lecture and laboratory  
MFGE-440, *Manufacturing Systems Design and Simulation*, 3 credits, 1 section, 4 hours lecture and laboratory

Prior Course Instruction

MFGE-106\*, *Impacts of Engineering Design*, 2 credits  
MFGE-145\*, *Introduction to Manufacturing Engineering*, 1 credit  
MFGE-320\*, *Material Removal Processes*, 3 credits  
MFGE-359\*, *Bulk & Sheet Metal Forming Processes*, 3 credits  
MFGE-375\*, *Joining and Fastening*, 1.5 of 3 credits  
MFGT-102, *Materials and Processes 1*, 1 of 3 credits, lab portion  
MFGT-110, *Materials and Manufacturing Processes*, 2 of 3 credits, lecture portion  
MFGT-203\*, *Machining and Metal Forming Processes*, 3 credits  
MFGT-252\*, *Material Removal and Forming Processes*, 3 credits, 2 section, 4 hours lecture and laboratory

\* indicates new course development prior to first time offering

## 7. Curriculum development, career pathways, and instruction, Western Technical College.

*Development*

Building Systems Technology A.A.S. Program, first offering Fall 2012

*Career Pathways*

Numerous discipline areas within Integrated Technologies Division, including:

- Welding Technologies
- CNC Operations
- Manufacturing Systems Maintenance Technician
- Building Systems Technology
- Electronic Systems Installation & Maintenance
- Mechanical Design Technology
- Automotive Technician
- Diesel & Heavy Equipment Technician

*Instruction*

University of Wisconsin-Stout CTE-346/546\* and 347/547\*, *Sustainable Concepts Infusion*, Online Course for Western Faculty

\* indicates new course development prior to first time offering

## 8. Principal publications.

Capturing Students for Manufacturing Engineering – Countering the Reverse Funnel Pipeline, Bee, D. and Rothaupt, R. *Proceedings of the 2008 ASEE Annual Conference*, Pittsburgh, PA, June 2008.

Ten Years of STEPS Success: Significant Impact In Attracting Girls to Science, Technology, and Engineering Careers, Bee, D., Puck, B., and Heimdahl, P., *Proceedings of the 2007 ASEE Annual Conference*, Honolulu, HI, June 2007.

Opportunities and Challenges for Manufacturing Engineering, Bee, D. and Meyer, B., *Proceedings of the 2007 ASEE Annual Conference*, Honolulu, HI, June 2007.

Developing Higher Order Problem Solving Skills Through Problem-Based Learning (PBL) in a Manufacturing Engineering Course, Bee, D., *Proceedings of the 2007 ASEE Annual Conference*, Honolulu, HI, June 2007.

Towards Sustainable “Product and Material Flow” Cycles: Identifying Barriers to Achieving Product Multi-Use and Zero Waste, Kumar, V., Bee, D., Shirodkar, P. Tumkor, S., Bettig, B., and Sutherland, J., *Proceedings of the 2005 ASME International Mechanical Engineering Congress and Exposition*, Orlando, FL, November 2005.

An Experiment on Sintering Characteristics of Coarse Nano-Scale Alumina for Manufacturing Students, Asthana, R., Bee, D., and Rothaupt, R., *Proceedings of the 2004 ASEE Annual Conference*, Salt Lake City, UT, June 2004.

Summer Technology & Engineering Preview at Stout (STEPS) for Girls, Bee, D., Puck, B., and Heimdahl, P., *Proceedings of the 2003 ASEE Annual Conference*, Nashville, TN, June 2003.

Inventory Management in Demanufacturing Facilities, Gunter, K., Bee, D., and Sutherland, J., *Proceedings of Colloquium on e-Ecological Manufacturing*, Berlin, Germany, March, 2003.

Back to the Future Manufacturing Engineering at Stout, Bee, D., *Proceedings of the 2001 ASEE Annual Conference*, Albuquerque, NM, June 2001.

## **9. University service, University of Wisconsin-Stout.**

Program Director, B.S. in Manufacturing Engineering, 1999 to 2003, and 2019 to 2021

Personnel Committee, Engineering and Technology Department, 2007-2008, 2020-2023

Department Chair, Engineering and Technology Department, 2008 to 2010

Program Director, M.S. in Manufacturing Engineering, 2007 to 2009

Coordinator, Sustainable Design and Development Minor, 2008 to 2009

Director, Sustainable Technology and Energy Center (STEC) Advisory Board, Stout Technology Transfer Institute, 2008 to 2010

Advisor for 25 graduate Manufacturing Engineering students

Advisor for 50+ undergraduate Manufacturing and Mechanical Engineering students

Technical Activities Coordinator and LEGO Professor, Advanced STEPS Summer Camp, 2005-2010

ABET Accreditation Coordinator, 1999 to 2007

Faculty Senator, 1998-2001

Faculty Senate Executive Committee, 2000-2001

Planning and Review Committee, 1998-2001 (Chair 2000-2001)

Numerous Search and Screen Committees (Engineering & Technology Department: Packaging, Manufacturing Technologies, Manufacturing Technician; Northwest Manufacturing Outreach Center: Center for Innovation and Development Director; University: Dean, College of Science, Technology, Engineering & Mathematics)

## **10. Honors and awards.**

*Fulton and Edna Holtby Manufacturing Engineering Chair*, 2024 to 2027

*Taft Professor of Manufacturing Engineering*, 1999 to 2002

## **11. Professional society memberships.**

Society of Manufacturing Engineers 1995-present

American Society of Engineering Educators 1996-2011, 2018 to present

## **12. Professional service.**

ABET-EAC Manufacturing Program Evaluator, available 2004 to 2012, 2021 to present

SME Accreditation and Education Committee, Member, 2021 to present

Stout FIRST LEGO League (FLL) Regional Tournament Director, 2005-2009, 2019

UW-Stout Manufacturing Engineering Program Advisory Board Member, 2010 to 2017

Director, Wisconsin FLL Planning Committee, 2006-2010

Steering Committee Member, SME Manufacturing Education and Research Technical Community, 2004-2014

Program Chair, 2007 ASEE North Midwest Section Conference, University of Wisconsin-Stout, Menomonie, WI, October 2006

Division Chair (2005-2006), Program Chair (2004-2005), Associate Program Chair (2003-2004) [administered peer reviewed manufacturing education papers for 2004 ASEE Annual Conference], Treasurer/Secretary (2002-2003), Webmaster (2001-2002), ASEE Manufacturing Division

## **13. Professional development activities.**

“Effective Teaching: A Workshop,” Dr. Richard Felder and Dr. Rebecca Brent, UW-Stout STEMM Education Workshop, January 2019

Student Motivation and Engagement Workshop, Dr. Mary Beth Leibham, UW-Stout Professional Development, January 2018

Toyota Kata Workshops, January & February 2014

National Career Pathways Network (NCPN) Annual Conference, October 2013

Wisconsin Leadership Development Institute (WLDI), June 2012 through June 2013

SME TCN Leaders Meeting and SME Annual Conference, June 2013

National Coalition of Advanced Technology Centers (NCATC) Annual Conference, October 2012

Sustainability Education & Economic Development (SEED) Annual Conference & Workshop, American Association of Community Colleges (AACC), October 2012

Sustainability & Curriculum: Workshop for Campus Leaders, Association for the Advancement of Sustainability in Higher Education (AASHE), July 2011

Framework of Poverty Workshop, December 2010

ASEE Annual Conference, June 1997, 2001 through 2007

WESTEC, SME Tech Summit, SME TCN Leaders Meeting, and SME Annual Meeting, April 2006

SME Tech Summit and TCN Leaders Workshop, August 2005

ABET Annual Meeting and Conference, November 2003

Program Evaluator Training Workshop, ABET Engineering Accreditation Commission, June 2003

ABET Outcomes Based Assessment Workshop, ABET Engineering Accreditation Commission, June 2002

Best Assessment Symposium, Rose Hulman Institute of Technology, March 2001

Problem Based Learning Curriculum Development, Southern Illinois University PBL Initiative Workshop,  
January 1998

University of Wisconsin Faculty College, May 1997

Total Quality Learning Seminar, David Langford, Inc., June 1996

Manufacturing Engineering Program Accreditation & Curriculum, SME Workshop, September 1995

Software Continuous Improvement: Arena Simulation, July 2007, Solidworks CAD, June 2006, Promodel  
Simulation, January, 2002, AutoCAD, January, 2001, UGS IDEAS CAD, June 1999