Nathan W. Klingbeil, Ph.D.
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EDUCATION

Institution	Field of Study	Degree/Date
Carnegie Mellon University	Mechanical Engineering	Ph.D., 1998
Carnegie Mellon University	Mechanical Engineering	M.E., 1995
University of Dayton	Mechanical Engineering	B.M.E., Summa Cum Laude, 1993

PROFESSIONAL EXPERIENCE

Position	Institution	Dates
Professor	Wright State University, Mech. & Mat. Eng.	09/08-Present
Dean	Wright State University, College of Eng & Comp Sci	05/13-06/18
Senior Associate Dean	Wright State University, College of Eng & Comp Sci	05/12-04/13
Associate Dean for Academic Affairs	Wright State University, College of Eng & Comp Sci	01/10-04/12
Director of Student Retention and Success	Wright State University, College of Eng & Comp Sci	07/07-12/09
Distinguished Professor of Teaching	Wright State University	07/05-06/08
Associate Professor	Wright State University, Mech. & Mat. Eng.	09/04-08/08
Assistant Professor	Wright State University, Mech. & Mat. Eng.	09/99-08/04
Materials Research Engineer	Air Force Research Laboratory (AFRL/MLLN)	06/98-08/99
Graduate Research Assistant	Carnegie Mellon University, Dept. of Mech. Eng.	06/94-06/98
Graduate Teaching Assistant	Carnegie Mellon University, Dept. of Mech. Eng.	08/93-05/94
Undergraduate Grader	University of Dayton, Dept. of Mech. Eng.	01/93-05/93
Undergraduate Teaching Assistant	University of Dayton, Dept. of Mathematics	08/91-05/93
Engineering Co-Op	DAP, Inc.	05/91-08/93

SELECTED PUBLICATIONS

1. Finfrock, R. and Klingbeil, N., 2023, "Examining the Impacts of the Wright State Model for Engineering Mathematics Education through Curricular Analytics," *Proceedings 2023 ASEE Annual Conference and Exposition*, Baltimore, MD, June 2023.
2. Tullis, R., Dunn, A., Young, D., Klingbeil, N. and Gockel, J., 2023, "Additive Manufacturing Bulk Parameter's Influence on Surface Roughness, Microstructure, and Fatigue," *JOM Journal of the Minerals, Metals and Materials Society*, Vol. 75, No. 6, pp. 1975-1981.
3. Tullis, R., Eidt, W., Gockel, J., Klingbeil, N. and Scott-Emuakpor, O., 2023, "Vibration-based Bending Fatigue of Additively Manufactured Alloy 718 with Varied Surface Conditions," *Fatigue & Fracture of Engineering Materials and Structures*, Vol. 46, No 4, pp. 1500-1511.
4. Rattan, K. S., Klingbeil, N. W. and Baudendistel, C.M., Introductory Mathematics for Engineering Applications, Second Edition, John Wiley & Sons, 2021. ISBN 978-1-119-60442-6.
5. Levkulich, N.C., Semiatin, S.L., Gockel, J.E., Middendorf, J.R., DeWald, A.T. and Klingbeil, N.W., 2019, "The Effect of Process Parameters on Residual Stress Evolution and Distortion in the Laser Powder Bed Fusion of Ti-6Al-4V," *Additive Manufacturing*, Vol. 28, pp. 475-484.
6. Beuth, J.L., Klingbeil, N.W. and Gockel, J.D., 2018, *Process Mapping of Cooling Rates and Thermal Gradients*. U.S. Patent No. US 9,939,394 B2. United States Patent and Trademark Office. Filed August 16, 2013 and Issued April 10, 2018.
7. Gockel, J., Sheridan, L., Narra, S., Klingbeil, N.W. and Beuth, J.L., 2017, "Trends in Solidification Grain Size and Morphology for Additive Manufacturing of Ti-6Al-4V," *JOM Journal of the Minerals, Metals and Materials Society*, Vol. 69, No 12, pp. 2706-2710.
8. Gockel, J., Klingbeil, N.W. and Bontha, S., 2016, "A Closed-Form Solution for the Effect of Free Edges on Melt Pool Geometry and Solidification Microstructure in Additive Manufacturing of Thin-Wall Geometries," *Metallurgical and Materials Transactions B*, Vol. 47B, pp. 1400-1408.
9. Klingbeil, N. and Bourne, T., 2015, "The Wright State Model for Engineering Mathematics Education: Longitudinal Impact on Initially Underprepared Students," *Proceedings 2015 ASEE Annual Conference and Exposition*, Seattle, WA, June 2015.

SELECTED PRESENTATIONS

1. Klingbeil, N., "Uprooting Curricular Barriers to Student Success in STEM," Online Panel Presentation, Just Equations Deep Dive Session – Uprooting the STEM Weedout System, March 2023.
2. Klingbeil, N., "Addressing Curricular Barriers to Increasing Student Success and Broadening Participation STEM," Workshop Presentation, AAC&U Transforming STEM Higher Education Conference, Crystal City, VA, November 2022.
3. Burdman, P., Klingbeil, N., Laursen, S., Roberts, M. and Rasmussen, C. (Moderator), "Panel #2: Math Reform in the Context of STEM Majors and the Larger Higher Education System," Roundtable on Systemic Change in Undergraduate STEM Education, ***The National Academics of Science, Engineering and Medicine***, Virtual Panel, July 2021.
4. Klingbeil, N., "Uncorking Curricular Bottlenecks to Diversity, Inclusion and Student Success in STEM," ***Plenary Address***, 12th Annual Conference on Higher Education Pedagogy, Virginia Tech, February 2020.
5. Klingbeil, N., "Uncorking Curricular Bottlenecks to Diversity, Inclusion and Student Success in STEM," 2019 S-STEM Symposium: Creating Pathways to an Inclusive STEM Workforce, Washington, DC, September 2019.
6. Klingbeil, N., "Uncorking Curricular Bottlenecks to Student Success in STEM," ***Keynote Address***, AAC&U Transforming STEM Higher Education Conference: Confirming the Authority of Evidence, Atlanta, GA, November 2018.
7. Klingbeil, N., "Models for Retaining Underrepresented and Underprepared Students," Academic Impressions Recruiting and Retaining Historically Underrepresented Students in STEM Conference, San Antonio, TX, October 2017.
8. Klingbeil, N., "Access, Affordability and Preeminence: Uncorking the Workforce Bottlenecks in Engineering and Computer Science Education," ***Keynote Address***, Silicon Valley Chamber of Commerce Workforce Education Summit, San Jose, CA, April 2016.
9. Klingbeil, N., "The Wright State Model for Engineering Mathematics Education: A Case Study in Transferable Pre-College Engineering Credit," ***Keynote Address***, Measuring and Credentialing Design Competencies as a Pathway to Higher Education and STEM Careers, University of Maryland College Park, April 2016.
10. Klingbeil, N., "The Wright State Model for Engineering Mathematics Education: Uncorking the Bottleneck to Student Success," ***Keynote Address***, AAC&U TIDES Institute, Washington, DC, July 2014.
11. Klingbeil, N., "Questioning the Equation," ***TEDx Dayton***, Dayton, OH, November 2013. https://www.youtube.com/watch?v=CWCWq155hyc

SELECTED HONORS AND AWARDS

1. More than $7.5M in total external funding, including over $5.5M from the National Science Foundation. Lead PI for Wright State's National Model for Engineering Mathematics Education, funded by NSF CCLI Phase 3, TUES Type 3 and STEP Type 1 awards.
2. Lifetime Achievement Award, Dayton Defense Educational Foundation, 2017.
3. Lifetime Achievement Award, American Society of Mechanical Engineers, Dayton Section, 2016.
4. Excellence in Teaching Award, College of Engineering and Computer Science, 2011, 2007 and 2002.
5. President's Award for Excellence, Outstanding Collaborative Unit - Dual Enrollment Program, Wright State University, Fall 2010.
6. Senior Vice President for Curriculum and Instruction Award, Wright State University, 2008.
7. Outstanding Engineers and Scientists Award, Affiliate Societies Council of Dayton, 2006.
8. Robert J. Kegerreis Distinguished Professor of Teaching, Wright State University, 2005-2008.
9. Ohio Professor of the Year, Carnegie Foundation for the Advancement of Teaching and Council for Advancement and Support of Education, 2005.
10. ASEE North Central Section Outstanding Teaching Award, 2004.

SELECTED PROFESSIONAL SERVICE

1. Governing Board, Dayton Regional STEM School, 2010-Present.
2. Board of Trustees, Engineering and Science Foundation of Dayton, 2015-Present.
3. Chair, Ohio Engineering Dean's Council, 2017-18.
4. Board of Trustees, Engineering and Science Hall of Fame, 2016-18.
5. Engineering University Transfer Program Advisory Committee, Sinclair Community College, 2010-18.
6. Secretary, Ohio Engineering Dean's Council, 2015-16.
7. Proposal Reviewer/Panelist, National Science Foundation, Division of Undergraduate Education (DUE), Division of Materials Research (DMR), and Division of Civil, Mech. and Manufacturing Innovation (CMMI).
8. Reviewer for over 10 archival journals.

PROFESSIONAL MEMBERSHIPS (Past and Present)

1. American Society for Engineering Education (ASEE). 2. American Society of Mechanical Engineers (ASME). 3. ASM International. 4. IEEE Education Society. 5. Honorary Membership, Golden Key International Honor Society. 6. Honorary Membership, Phi Kappa Phi National Honor Society. 7. Sigma Xi, The Scientific Research Society. 8. Tau Beta Pi