

CURRICULUM VITAE
BERND F. SCHLIEMANN

January 2022

CURRENT POSITION

Senior Lecturer & Chief Undergraduate Advisor
Department of Mechanical and Industrial Engineering
University of Massachusetts Amherst
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RECENT POSITIONS

Lecturer
College of Engineering
University of Massachusetts Amherst

Director of Planning & Workforce Development
Office of University Outreach
University of Massachusetts Amherst

Professor and Department Chair
Department of Military Leadership
University of Massachusetts Amherst

EDUCATION

Ph.D.	University of Massachusetts Amherst
M.B.A.	University of Massachusetts Amherst
M.S.	Georgia Institute of Technology
B.S.	United States Military Academy

TEACHING EXPERIENCE

University of Massachusetts, Amherst, Massachusetts. Senior Lecturer, Department of Mechanical and Industrial Engineering, 2015-present.

- Taught an in-person introductory engineering course to prospective mechanical and industrial engineering students.
- Taught an in-person and online statics course to undergraduate civil and mechanical engineering majors.
- Taught an in-person strength of materials course to undergraduate mechanical engineering majors.
- Taught both in-person and online probability and statistics courses to undergraduate civil and mechanical engineering majors.
- Taught an in-person mechanical engineering lab course to undergraduate mechanical engineering majors.
- Taught an in-person engineering economics course to undergraduate mechanical and industrial engineering majors.
- Taught an in-person and online manufacturing processes course to undergraduate mechanical and industrial engineering majors.
- Taught a junior design course to undergraduate mechanical engineering majors.
- Taught a senior design course to undergraduate industrial engineering majors.
- Co-taught a senior design course to undergraduate mechanical engineering majors.
- Developed and taught an in-person graduate level engineering ethics course to doctoral candidates in the multidisciplinary wind energy program.
- Earned consistently superb ratings from students.

University of Massachusetts, Amherst, Massachusetts. Lecturer, College of Engineering, 2008-2015.

- Developed engineering seminar course designed to inspire first-year undergraduate students to pursue engineering majors; introduced varied engineering disciplines and critical student success skills.
- Taught both in-person and online engineering economics courses to undergraduate mechanical and industrial engineering majors.
- Taught both in-person and online statics courses to undergraduate civil and mechanical engineering majors.
- Taught an in-person systems analysis course to undergraduate civil engineering majors.
- Taught both in-person and online probability and statistics courses to undergraduate civil and mechanical engineering majors.

- Developed and taught a science and engineering ethics seminar for a cohort of multi-disciplinary off-shore wind energy doctoral students.
- Earned consistently superb ratings from students.

University of Massachusetts, Amherst, Massachusetts. Adjunct lecturer, Isenberg School of Management, 2006-present (concurrent with College of Engineering position).

- Taught graduate business statistics at Berkshire Medical Center, Holyoke Community College, and online for the part-time M.B.A. program.
- Earned consistently superb ratings from students.

Smith College, Northampton, Massachusetts. Adjunct lecturer, Picker Engineering Program, 2012-2013, 2018 (concurrent with University of Massachusetts position).

- Taught an in-person manufacturing processes course to junior and senior undergraduate engineering majors.
- Taught undergraduate introductory engineering design course for first-year students.
- Developed an engaging and novel course using a disaster relief theme with numerous in-class and lab activities.
- Earned consistently superb ratings from students.

Massachusetts College of Liberal Arts, North Adams, Massachusetts. Adjunct lecturer, Economics, 2012 (concurrent with University of Massachusetts position).

- Taught hybrid (in-person and online) undergraduate statistics course.

University of Massachusetts, Amherst, Massachusetts. Professor and Department Chair, Department of Military Leadership (Army ROTC), 2001-2005.

- Taught undergraduate leadership and military law courses on campus and at Western New England University.
- Introduced revised curriculum and conducted annual faculty workshops.
- Served as a professional mentor to over 200 students.
- Earned consistently superb ratings from students.

United States Military Academy, West Point, New York. Assistant Professor, Department of Mathematical Sciences, 1996-1998.

- Taught undergraduate discrete dynamical systems (pre-calculus), calculus, and probability and statistics courses.
- Responsible for the professional development of 9 junior faculty members teaching the core statistics course.
- Earned consistently superb ratings from students.

PROFESSIONAL QUALIFICATIONS

Professional Engineer, Commonwealth of Virginia, 1996-present

Top Secret security clearance, 1999-2005

ADMINISTRATIVE EXPERIENCE

University of Massachusetts, Amherst, Massachusetts. Senior Lecturer, Department of Mechanical and Industrial Engineering, 2015-present.

- Developed industry-sponsored design projects for the mechanical engineering and industrial engineering senior design classes; this often involved meeting with company management at their facilities and addressing intellectual property, timeline, and expectations in order to best benefit the company and student groups.
- Led the redesign of the industrial engineering web pages as part of a strategic effort to increase visibility of the program.

University of Massachusetts, Amherst, Massachusetts. Lecturer, College of Engineering, 2008-2015.

- Developed industry-sponsored design projects for the mechanical engineering senior design class; this often involved meeting with company management at their facilities and addressing intellectual property, timeline, and expectations in order to best benefit the company and student groups.
- Co-led the College of Engineering strategic planning effort.
- Serve as the primary contact in the College of Engineering for data collection and analysis. Prepare persistence and other reports requested by deans, department heads, directors, and others in the College.
- Advised 40-50 assigned pre-engineering majors every semester.
- Advised students on academic warning and probation; students interested in changing majors into or out of engineering; and students with academic or personal issues.
- Managed the College of Engineering website redesign in 2012-2013.
- Authored applications for National Science Foundation and American Association of University Women grants.

University of Massachusetts, Amherst, Massachusetts. Director of Planning and Workforce Development, 2005-2008.

- Led the formation of a division-wide program development committee which generated ideas and explored proposals for continuing education and

workforce development offerings. Managed the Division of Outreach program innovation fund to help stimulate new credit and noncredit program offerings.

- Authored a Division of Outreach comprehensive strategy for economic and workforce development.
- Participated in the grant application for the Department of Labor Workforce Innovation in Regional Economic Development program with the Hartford-Springfield Economic Partnership, Hampden County Regional Employment Board, and other regional workforce development agencies.
- Nutured relationships with area Regional Employment Boards, the Economic Development Council of Western Massachusetts (EDC), and other economic and workforce development entities in the region.
- Developed a regional database of companies associated with the precision manufacturing cluster in Western Massachusetts for the EDC and local precision machining companies.
- Provided strategic and tactical direction for a relatively new and reorganized administrative unit.
- Shouldered human resources changes and fiscal oversight of the five unit organization responsible for approximately 300 employees and revenue in excess of twenty million dollars.
- Led the strategic planning for two strategic business plans in the division. Develop metrics and a scorecard reporting process to measure progress of strategic goals.
- Introduced continuous improvement tools and culture into the organization to streamline processes that reduced expenses and increased productivity.
- Worked closely with the marketing staff to ensure consistent message and branding for announcements, publications, and initiatives.

University of Massachusetts, Amherst, Massachusetts. Professor and Department Chair, Department of Military Leadership (Army ROTC), 2001-2005.

- Revamped training, recruiting, and retention in a stagnant program to achieve a 17 of 272 national ranking. Expanded program and enrollment at three major regional schools through market research, building of external networks, and outreach to new constituencies.
- Energized weak operations and training program. Established structured training plan with tracking metrics to measure progress of each student. Achieved top ranking of all 20 programs in New England.
- Hand-selected by higher headquarters to serve as leader of confidence training for 4,000 students. Mitigated a dangerous 7-week training program through prudent safety controls.
- Developed team-building training for two leadership programs at no cost to customer. Received consistently positive feedback on the conduct and benefits of the training.

MILITARY EXPERIENCE

United States Army. Completed service as a lieutenant colonel, serving in several important command and staff positions at locations in the United States, Europe, and Asia, 1985-2005.

- Led organizations from 4 – 170 people with fiscal responsibility for million dollar budget and equipment valued in excess of twelve million dollars.
- Consistently rated in the top 10% of peer group while in demanding management positions.
- Built several high performing teams through proper balance of positive leadership, conflict resolution, and adherence to organizational values. Lauded as an inspirational and caring leader by numerous subordinates.
- Selected to fix the worst (readiness, training, discipline) unit in the organization. Led the successful turn-around of the unit and subsequent number one ranking. Earned best-trained honor amongst 18 teams.
- Selected as the organization's nominee for the General MacArthur Leadership Award nominee amongst eight peers. Recognized by senior management as a finalist for this prestigious annual worldwide award.
- Integral in the planning, design, management, and quality control of over two million dollars worth of construction projects including several small buildings, road improvements, and parking lots.
- Developed and implemented comprehensive annual training programs to increase organizational readiness. Received laudatory comments during the conduct of two realistic emergency deployment and readiness exercises.
- Revamped numerous organizational programs including training readiness, operations, deployment, and reporting. Implemented proactive management systems to ensure compliance with published regulations and worker safety.

COMMITTEE ASSIGNMENTS, UNIVERSITY OF MASSACHUSETTS

- Department Undergraduate Committee, 2015-present
- College of Engineering Lecturer Promotion Committee (chair), 2016
- College of Engineering Strategic Planning Committee, 2014-2015
- Men and Masculinities Center Advisory Board, 2014-present
- Sophomore Year Task Force, 2010-2012
- College of Engineering Lecturer Promotion Committee (chair), 2010
- Military Affairs Committee, 2005-2009
- Faculty Senate Campus Physical Planning Committee, 2005-2008
- Provost's Committee on Fee and Revenue Sharing, 2005-2006
- Chancellor's Inauguration Committee, 2004-2005

- Faculty Senate General Education Council, 2003-2005
- Provost's Committee on Leadership Education, 2002-2003

PUBLICATIONS & PRESENTATIONS

- *How to be a Veteran*. Invited presentation on Veterans' Day to campus community, Amherst, Massachusetts, 2015.
- *From Tank Trails to Technology Parks: the Impact of Base Redevelopment for New England*. Ph.D. dissertation, University of Massachusetts, 2012.
- *The Profile of a Veteran*. Invited presentation on Veterans' Day to campus community, Amherst, Massachusetts, 2010.
- *The Impact of Military Base Closings: Predicting Community Resilience* (with H. Renski), paper presented at Association of Collegiate Schools of Planning Conference, October 1-4, 2009.
- Managing Editor, Mathematica Militaris. The Bulletin of the Mathematical Sciences Departments of the Federal Service Academies, United States Military Academy, 1997-1998.
- *Analysis and Modeling of the Initiative Tenet of Current Army Operations Doctrine*. Master's thesis, Georgia Institute of Technology, 1996.

COMMUNITY SERVICE

- Admissions Liaison, U.S. Military Academy, 2011-present
- Treasurer, Belchertown High School Hockey Boosters, 2013-2014
- Team Representative, Belchertown (Youth) Lacrosse Association, 2010
- Team Representative, Amherst (Youth) Hockey Association, 2007-2008
- Chair, Community Plan Committee, Town of Belchertown, 2007-2008
- Youth Soccer Coach, Town of Belchertown, 2002-2003
- School Volunteer, Town of Belchertown, 2001-2014
- Patroller, National Ski Patrol, 1984-1985, 2013-present
- Ski Instructor, Amateur Ski Instructors Association, 1983-1985