

Cecelia M. Wigal, Ph. D., P.E.

BSEE: Electrical Engineering

MSEE: Electrical Engineering

Ph.D.: Industrial Engr. & Management Sciences

Ohio Northern University, 1985

Illinois Institute of Technology, 1991

Northwestern University, 1998

Academic Experience

University of Tennessee at Chattanooga, Professor, August 2008 – present, FT

University of Tennessee at Chattanooga, Professor, Associate Dean, Aug 2013 – Jul 2014, FT

University of Tennessee at Chattanooga, Professor, Assistant Dean, Aug 2009 – Jul 2013, FT

University of Tennessee at Chattanooga, Associate Professor, Aug 2003 – Jul 2008, FT

University of Tennessee at Chattanooga, Assistant Professor, Aug 1999 – Jul 2003, FT

Northern Illinois University, Visiting Assistant Professor, Jan 1999 – May 1999, FT

Northwestern University, Adjunct Professor, Sep 1998 – Dec 1998, PT

Northwestern University, Teaching Assistant, Jan 1998 – Jun 1998, PT

Northwestern University, Instructor, Sep 1996 – Dec 1996, PT

Non-Academic Experience:

Hamilton-Sundstrand Corporation

- Senior Program Engineer II, System and specification definition of the electrical power system for the NASA Fly-By-Wire project, Jun 1994 – Sep 1994, FT
- Senior Program Engineer I, II, Led preliminary design of aircraft electrical systems working with Marketing and Research, Jan 1989 – Sep 1993, FT
- Project Engineer I, II, Lead systems engineer of the Electrical System Bus Control Unit for the Boeing 747-400 aircraft, Jul 1985 – Dec 1989, FT

Certifications or Professional Registrations

PE License – State of Ohio (PE. 67594)

Current Membership in Professional Organizations

ASEE, ASEE-SE, INFORMS, AAUW, POMS, SWE, Sigma Xi, Phi Kappa Phi, Tau Beta Pi

Honors and Awards

Chattanooga Young Women's Leadership Academy Foundation Super Nova Award for Outstanding Work in STEM (2011)

ASEE Systems Engineering Division Best Paper (2011)

ASEE Southeast Section Conference Outstanding Paper (2007)

ASEE Southeast Section Tony Tillman Service Award (April 2006)

Grants and Research Award (University of Tennessee at Chattanooga 2007, 2006, 2004)

UC Foundation Associate Professorship (University of Tennessee at Chattanooga, 2003)

Exceptional Merit Award (University of Tennessee at Chattanooga 2011, 2010, 2008, 2007, 2006, 2005, 2004, 2003)

Engineering Research Award (UTC College of Engineering and Computer Science, 2002)

Walter P. Murphy Fellowship (Northwestern University, 1993 - 1994)

Certificate of Outstanding Performance from the Boeing Commercial Airplane Group - Renton Electrical Systems (1993)

Service Activities

Chair: College of Engineering and Computer Science By-Laws Task Force (2015 – present),
College Curriculum Committee (2012-2014),

Member: University Institutional Assessment and Effectiveness Committee (2012 – present),
University Taleo Software, Faculty Position Applications Committee (2013- present), BSE
ABET Assessment Committee, Library Re-use Committee, ThinkAchieve Advisory Board
American Society for Engineering Education Southeast Section: Secretary (April 2015 –
present): Chair, Industrial Engineering Section (2001 – 2002, 2013-2014): Vice President
Awards and Recognition (2011-2012)

Ohio Northern University Engineering Education Advisory Board (2013 – present), Chattanooga
Community College General Engineering Advisory Board (2011 – present)

Principal Publications and Presentations of Last Five Years:

UTeach Institute Conference (May 2015): Invited Panelist “Engineering Pathways”, Co-
panelists: John Mayer University of Alabama Birmingham, Malinda Zarske University of
Colorado Boulder, Adam Fontecchio Drexel University, Jill Marshall Univ of Texas Austin.

***Southeastern Section of the American Society for Engineering Education Annual Meeting
(Apr. 2015) :*** Presentation “Engineering Design and K-12 Education - What is the Connection?”

Charles W. N. Thompson Symposium (October 25, 2014): Invited Speaker: Topic - Engineering
Education and the Role of Systems Thinking

***Southeastern Section of the American Society for Engineering Education Annual Meeting
(Apr. 2014):*** Presentation: “Using Microsoft Google Sites to Communicate Student Capstone
Project Design Progress and Management”

2013 Industrial and Systems Engineering Research Conference (May 2013): Proceedings and
Presentation: “Utilizing Healthcare Environments for Undergraduate IE Projects” Philip
Kazemersky, Co-Author and Presenter: University of Tennessee at Chattanooga

2013 Ohio Northern University Engineering Women Celebration (April 2013): Invited
Program Speaker: “Retention of Women in Engineering Programs... the Real Issue?”

***ACEC, ASCE, & TSPE 2012 Annual Meeting and Professional Development Conference
(Sept. 2012):*** ACEC Invited Speaker: “Definition and Drivers of Engineering Education Today”

ABET Annual Conference: (Nov 2011): Invited Panel Session Speaker: “University of
Tennessee at Chattanooga BSE Engineering: UTeach, An Accredited Program”: Invited Panel
Session Speaker: “Effective Community College Transfer Pre-Engineering Program”

The American Society for Engineering Education Annual Conference (June 2011):
Presentation and Proceedings: “Identifying and Defining Relationships: Techniques for
Improving Student Systemic Thinking”

State of Tennessee Special Education Conference (Feb. 24 – 26, 2010): Presentation: “How
Teaming with an University Engineering Program can Increase Student Independence”, Co-
presenter: Molly Littleton

Recent Professional Development Activities

UTC Instructional Excellence Workshop (May 2015), “Improvisational Design of Engineering
Alternatives” (April 2014), Conference Attendance (ASEE, ASEE-SE, National Collegiate
Honors Council)