

William L. Gillis III,
PhD, PE, PMP, LEED AP,
M.ASCE, M.ASHRAE
Assistant Teaching Professor
Civil, Architectural, and Environmental Engineering
Missouri University of Science and Technology
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EDUCATION

Doctor of Philosophy, Engineering Management

Missouri University of Science and Technology, 2013. Dissertation: *Development of an Integrative Commissioning Methodology for New-Building Construction.*

Chair: Dr. Elizabeth Cudney

Graduate Certificate, Project Management

Missouri University of Science and Technology, 2011

Master of Business Administration

Webster University, St. Louis, 2006

Bachelor of Science, Mechanical Engineering

University of Missouri - Rolla, 1999

EXPERIENCE

University of Missouri System, Jun 2007 - Present

Missouri University of Science and Technology, Rolla, MO

Civil, Architectural and Environmental Engineering Department

Assistant Teaching Professor, Aug 2016 - Present

Lecturer, Aug 2013 – Jul 2014

Adjunct Professor, Aug 2011 – Jul 2013, Aug 2014 – Dec 2014

Engineering Management and Systems Engineering Department

Adjunct Professor, Jan 2014 – May 2016

Design & Construction Management Department

Design Engineer/MEP Engineer, Jun 2007 – Jul 2013

University of Missouri – Columbia, MO

Planning, Design, and Construction Department

Managing Engineer, Aug 2014 – Aug 2016

Emerson Climate Technologies - Copeland Scroll Compressors, Lebanon, MO
Senior Manufacturing Engineer/Preventive Maintenance Supervisor, Jan 2005 – Jun 2007

Rolla Public School District - Rolla Technical Institute/Center, Rolla, MO
e-Business Program Instructor, 2004

ATK Alliant Techsystems - Lake City Army Ammunition Plant, Independence, MO
Senior Manufacturing Engineer, Jul 2002 – Jan 2004

Briggs & Stratton Corporation - Small Engine Manufacturing Plant, Rolla, MO
Corporate Manufacturing Engineer, Jan 2001 – Jul 2002

The Doe Run Company - Resource Recycling Division, Boss, MO
Plant/Mechanical Engineer, May 1999 – Jan 2001

U.S. Army Reserve, Sep 1995 – Sep 2003
Primary MOS – 63W, Wheeled Vehicle Mechanic
Secondary MOS – 35N, Wire Systems Equipment Repair

EFCO Corporation – Curtain Wall and Storefront Window Manufacturing, Monett, MO
Shipping Department Supervisor, Jul 1990 – Apr 1995
Shipping Department Staff, Aug 1989 – Jul 1990

Century Marble - Cultured Marble and Onyx, Pomona, CA
Marble Mason (Residential Construction), Nov 1984 – Jul 1989

TEACHING

COURSES TAUGHT - Missouri S&T

CivE 3842 Fundamentals of Building Systems
Traditional & hybrid delivery
CivE /ArchE /EnvE 4097 Senior Design Project
CivE /ArchE 5446 Management of Construction Costs
ArchE 2103 Architectural Materials and Methods of Construction
ArchE 5872 /MechE 5571 Environmental Controls
ArchE 4800 Principles of HVAC I
ArchE 4850 Building Electrical Systems
EMgt 1100 Practical Concepts for Technical Managers
EMgt 5320 Project Management; Hybrid delivery
EMgt 5210 Economic Decision Analysis; Hybrid delivery

INVITED LECTURES - Missouri S&T

CivE /ArchE 5460 Green Engineering: Analysis of Constructed Facilities
Hybrid delivery course
Topic presented - *Missouri S&T: Green Campus*

Topic presented - *LEED & Commissioning*

COURSES TAUGHT - Rolla Technical Institute/Center

Perl Programming Language – Web Applications
Introduction to Business
e-Commerce
HTML Programming – Web Design

ADVISING

Missouri S&T

ASHRAE Student Chapter - Faculty Advisor (2013 – present)
Engineers Without Borders – Mentor (2016- present)
Society of Hispanic Professional Engineers Student Chapter –
Faculty Advisor (2016 – present)
Solar House Design Team – Mentor (2016 – present)

University of Missouri-Columbia

Mechanical Contractors Association of America (MCAA) Student Chapter –
Faculty Advisor (2014 – 2016)

PROFESSIONAL CERTIFICATIONS

Project Management Professional – PMI, 2014
Professional Engineering Manager – ASEM, 2013
Qualified Commissioning Process Provider – UW-Madison, 2011
LEED AP – Building Design & Construction – GBCI, 2010
Professional Engineer – Missouri, 2009

PROFESSIONAL MEMBERSHIPS

American Society of Civil Engineers
American Society of Heating, Refrigerating and Air-Conditioning Engineers
Project Management Institute
Society of Hispanic Professional Engineers
Engineers Without Borders

Order of the Engineer
Pi Tau Sigma, International Mechanical Engineering Honor Society
Tau Beta Pi, Engineering Honor Society

PROFESSIONAL DEVELOPMENT COURSEWORK/TRAINING

Advanced Planning, Design & Construction (Institute for Facilities Management–APPA)
General Administration & Management (Institute for Facilities Management–APPA)
Commissioning Process for Delivering Quality Constructed Projects (UW-Madison)
Commissioning Process for LEED Projects (UW-Madison)
Commissioning Process for Existing Buildings (UW-Madison)
Leading the Commissioning Process (UW-Madison)
Developing Owner’s Project Requirements (UW-Madison)
HAZWOPER Certification (UMR)
Water & Wastewater Management Program; *passed DNR licensing exam* (Crowder College)
Autodesk Revit Architecture – Intermediate (Mid-West CAD)
Autodesk Revit MEP – Advanced (Mid-West CAD)
Power Distribution (Cooper Power/UMR)
Distribution Overcurrent Protection (Cooper Power/UMR)
Commercial Electrical Design (UW-Madison)
Grounding (The Electrical Board of Missouri and Illinois)
Fundamentals of Lighting Efficiency (Effective Lighting Solutions)
Hydronics Design & Application (Bell & Gossett)
Modern Hydronics – Advanced Design (Bell & Gossett)
Large Chilled Water Systems Design (Bell & Gossett)
NABCEP Solar Electric Systems (ONTILITY, LLC/Graybar, Inc.)
Motoman Robotics XRC & MRC Controller – Advanced Programming (Motoman Robotics)
DVT Machine Vision – Advanced Programming (DVT/Cognex)
Allen Bradley PLC– Advanced Programming (Rockwell Automation)

PUBLICATIONS

Journal Articles: 3 published,
Book Chapters: 2 book chapters published
Refereed Conference Papers: 5 published

REFEREED JOURNAL PAPERS

- [1] Cudney, E, and Gillis, W., (2016) Quality Function Deployment Implementation in Construction: A Systematic Literature Review, *Frontiers of Engineering Management*, Vol. 3 (3), 224-230.
- [2] Gillis, W., and Cudney, E., (2015) A Methodology for Applying Quality Function Deployment to the Commissioning Process, *Engineering Management Journal*, Vol. 27 (4), 177-187.
- [3] Gillis, W., and Cudney, E., (2015) A Standard for the Commissioning Process, *Frontiers of Engineering Management*, Vol. 2 (1), 39-51.

BOOK CHAPTERS

- [1] Gillis, W. and Cudney, E., (2014) “A New Methodology for Eco-Friendly Construction: Utilizing Quality Function Deployment to Meet LEED Requirements”, Azevedo, S., Brandenburg, M., Carvalho, H., and Cruz-Machado, V., Editors, *Eco-Innovation and the Development of Business Models: Lessons from Experience and New Frontiers in Theory and Practice*, Springer.
- [2] Gillis, W., and Cudney, E., (2014) “Applying the House of Quality to the New-Building Construction Commissioning Process”, Freund, L., and Cellary, W., Editors, *Advances in the Human Side of Service Engineering*, AHFE Conference @ 2014.

REFEREED CONFERENCE PAPERS

- [1] Cudney, E., and Gillis, W., (2016) “Quality Function Deployment Implementation in Construction: A Systematic Literature Review”, *2nd International Forum on Engineering Management & the 10th China Engineering Management Forum (IFEM & CEMF 2016)*.
- [2] Gillis, W., and Cudney, E., (2015) “A Standard for the Commissioning Process”, *Proceedings of the International Summit Forum on Engineering Science and Technology Development Strategy*.
- [3] Gillis, W., and Cudney, E., (2014) “Applying the House of Quality to the New-Building Construction Commissioning Process”, *Proceedings of the 2nd International Conference on Human Side of Service Engineering*.
- [4] Gillis, W., (2013) “Understanding the Design Impacts Among LEED Certification Credits”, *Proceedings of the Industrial and Systems Engineering Research Conference*.
- [5] Gillis, W., (2012) “Adapting the House of Quality for the LEED Commissioning Process in New-Building Construction”, *Proceedings of the ASEM International Annual Conference*.

CONFERENCE PRESENTATIONS

- [1] Gillis, W., (2013) “Understanding the Design Impacts Among LEED Certification Credits”, *Industrial and Systems Engineering Research Conference, IIE Annual Conference and Expo*.
- [2] Gillis, W., (2012) “Adapting the House of Quality for the LEED Commissioning Process in New-Building Construction”, *American Society for Engineering Management International Annual Conference*.

AWARDS/HONORS

PAPER AWARDS

2nd Place - SEMS Student Technical Paper Competition,
IIE Annual Conference and Expo, 2013

2nd Place - Merl Baker Award for Best Student Paper,
ASEM International Annual Conference, 2012

CAMPUS AWARDS

Excellence in Service to Students Award (Fall 2017),

The National Society of Leadership and Success (Sigma Alpha Pi student chapter)

Professor Appreciation Award (Fall 2017),

Chi Epsilon student chapter - Missouri S&T

Diversity in Leadership Award (Fall 2017),

Leadership and Cultural Programs Department – Missouri S&T

PROFESSIONAL AWARDS

2015 Outstanding Professional Engineer in Higher Education

St. Louis Chapter of the Missouri Society of Professional Engineers

SERVICE ACTIVITIES

PROFESSIONAL SERVICE

Faculty Advisor/Mentor

ASHRAE Student Chapter (2013- present)

Engineers Without Borders (2016 - present)

Society of Hispanic Professional Engineers Student Chapter (2016 – present)

Solar House Team (2016 – present)

Mechanical Contractors Association Student Chapter (2014-2016)

CAMPUS SERVICE

Chancellor's Committee for Diversity and Inclusion (2017 – present)

CAREE Building Committee (2016 – present)

Architectural Engineering Program Committee (2016 – present)

Employee Development Advisory Committee (2009-2010)