**DR. GEORGE D. FORD P.E.**

Professor

Building Construction Science

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Mississippi State University

Starkville, MS 39762

**EDUCATION**

Western Carolina University Cullowhee, NC

Ed.D. in Educational Leadership 2008

University of South Carolina Columbia, SC

M.E. in Environmental Engineering 1999

Clemson University Clemson, SC

MBA 1990

Clemson University Clemson, SC

B.S. in Mechanical Engineering 1984

**HIGHER EDUCATION Experience**

Mississippi State University Starkville, MS

*Professor, Building Construction Science* July 2018-Present

*Professor of Building Construction Science*

* Responsible for teaching undergraduate program in a Building Construction Science with 10 faculty and 260 majors.
* Teach Scheduling, Finance, Safety, Estimating, and Mechanical/Electrical Systems.
* Led accreditation team in 2020. Program received initial accreditation by the American Council for Construction Education (ACCE)
* Served as Department Head from 2018-2022
* Certified 30 Hour OSHA Safety Trainer.

Western Carolina University Cullowhee, NC

*Director, Master of Construction Management Program* August 2007-July 2018

*Associate Professor of Construction Management*

* Responsible for teaching undergraduate students in Construction Management
* Courses taught: Statics; Facilities Management; Mechanical and Electrical Systems; and Environmental Health and Safety

Western Carolina University Cullowhee, NC

*Visiting Assistant Professor of Engineering Technology* August 2006-August 2007

* Taught courses in Engineering Materials, Statics, Plant Layout, Introduction to Engineering Technology, Senior Project, & Engineering Economics

Western Carolina University Cullowhee, NC

*Senior Faculty Associate, Engineering & Technology Department* August 2004-August 2006

* Performed administrative duties such as class scheduling, assessment, recruiting and manpower planning as assigned by the Department Head.
* Directed all ABET efforts for accreditation.

Spartanburg Community College Spartanburg, SC

*Program Director, Mechanical Engineering Technology Program* August 2000-August 2004

* Performed teaching and administrative duties as required for two-year engineering technology program.
* Taught Surveying, Drafting, Mechanical Systems, and Safety.

**PROJECT MANAGEMENT & INDUSTRIAL EXPERIENCE**

Sealed Air Corporation Simpsonville, SC

*Environmental Manager, Cryovac Division* 1997-2000

* Responsible for supervising 25 personnel performing safety and environmental duties for large printing company.
* Provided oversight for all construction projects.

Sealed Air Corporation Duncan, SC

*Environmental Engineer, Cryovac Division* 1995-1997

* Traveled to ten plants in North America to oversee environmental and safety projects and programs.

Sealed Air Corporation Simpsonville, SC

*Facilities Engineering Manager, Cryovac Division* 1990-1995

* Responsible for supervising 25 personnel performing HVAC, electrical, mechanical and fire protection related duties for large printing company.
* Responsible for all power related systems including 100KV to 480V systems.
* Oversaw all building construction projects such as warehouses and manufacturing buildings including all mechanical and electrical systems.

Dunlop Slazenger Seneca & Westminster, SC

*Plant Engineer* 1988-1990

* Responsible for all plant, power and production equipment maintenance and all construction projects in a world-class golf ball operation including buildings, manufacturing equipment and infrastructure systems.
* Supervised full-time crew of 25 personnel.

Wilson Sporting Goods Fountain Inn, SC

*Assistant Plant Engineer* 1986-1988

* Responsible for plant improvements and construction projects

Davis Mechanical Contractors Greenville, SC

*Project Manager* 1984-1986

* Responsible for piping and mechanical construction projects

**TEACHING INTERESTS**

* Construction Management and Facilities Engineering
* Environmental, Health and Safety
* Mechanical and Electrical Systems
* Statics
* Surveying

**Scholarship**

Ford, G., Rokooei, S., Garshasby, M. (2023). Conducting In-Person Project Critique Sessions to Enhance Communications Skills in Technology Educational Programs. 2023 ASEE-SE Annual Conference, Arlington, VA

Rokooei, S., Alvanchi, A., Shojaei, A., Ford, G. (2023). Developing an Impact Model in Construction Companies During Pandemics, Journal of Engineering, Project, and Production Management. (EPPM-Journal)

Shojaei, A., Rokooei, S., Carson, L., Mahdavian, A., Ford, G. (2021). Using Immersive Video Technology for Construction Management Content Delivery: A Pilot Study, Journal of Information Technology in Construction (ITcon), 26:886-901, DOI: 10.36680/j.itcon.2021.047

Rokooei, S., Ford, G. (2020). Decreasing Gender Disparity in Construction Management Higher Education through Summer Camps, 12th Conference on Higher Education Pedagogy, Virginia Tech, Blacksburg

Shojaei, A., Rokooei, S., Carson, L., Mahdavian, A., Ford, G. (2020). Immersive Video Capture Technology for Construction Management Education, 20th International Conference on Construction Applications of Virtual Reality, Middlesbrough, UK

Rokooei, S., Ford, G. (2019). Comparison of Industry and Students’ Perceptions in a Studio-based Construction Program, 55th Annual International Conference of the Associated Schools of Construction (ASC), Denver, CO

Rokooei, S., Ford, G. (2019). Is Summer Semester Effective Enough in Studio-based Construction Programs? 2019 ASEE Annual Conference and Exposition, Tampa, FL, DOI: 10.18260/1-2--33031

Ford, G., Rokooei, S. (2019). Thirty-Hour Safety Course for Construction Technology Academic Programs, 2019 ASEE Annual Conference and Exposition, Tampa, FL

Rokooei, S., Ford, G. (2019). Perceptions of Construction Students and Professionals of a Studio-based Teaching Model, 11th Conference on Higher Education Pedagogy, Virginia Tech, Blacksburg

[Al-Bayati](https://ascelibrary.org/author/Al-Bayati%2C%2BAhmed%2BJalil), A., [Albert](https://ascelibrary.org/author/Albert%2C%2BAlex), A., and [Ford](https://ascelibrary.org/author/Ford%2C%2BGeorge), G., (2019) [Construction Safety Culture and Climate: Satisfying Necessity for an Industry Framework](https://ascelibrary.org/doi/abs/10.1061/%28ASCE%29SC.1943-5576.0000452). [Practice Periodical on Structural Design and Construction](https://ascelibrary.org/journal/ppscfx). November, 24-4.

 Ford, G., and Rokooei, S. (2019). Thirty-Hour Safety Course for Construction Technology

 Academic Programs. Proceedings at the American Society for Engineering Education

 National Conference. Tampa, FL.

Ford, J., and Ford, G. (2019). Army warrant officer career fields curriculum transferability

into four-year technology programs. Proceedings at the American Society for Engineering Education National Conference. Tampa, FL.

Rokooei, S., Ford, G., and Thompson, T. (2019). Comparison of Industry and Students’ Perceptions in a Studio-based Construction Program. Proceedings of the 55th Annual Associated Schools of Construction Conference. Denver, CO.

Rokooei, S., Ford, G., and Thompson, T. (2019). Perceptions of construction students and professionals of a studio-based teaching model. Proceedings of the Conference on Higher Ed Pedogogy. Blacksburg, VA.

Ford, G., Karyaka, H and Suk, J. (2018). Air Entrapment Issues in Piping for a Small Hydroelectric Station in Western North Carolina. Proceedings at the American Society for Engineering Education National Conference. Salt Lake City, UT.

Ford, G., and Ford, J. (2018). The Evolution of College Credit Recommendations for the United States Army by the American Council on Education. Proceedings at the American Society for Engineering Education National Conference. Salt Lake City, UT.

Suk S., and Ford, G. (2017). An Experiment on the Effect of the Use of Augmented Reality on Students’ Quantity Take-off Performance. Proceedings at the International Symposium on Automation and Robotics in Construction. Taipei, Taiwan

## Suk S., Sciara, S., and Ford, G. (2017). A review of the benefits of a residential solar power installation in western North Carolina. Proceedings at the American Society for Engineering Education National Conference. Columbus, OH.

## Ford, J., and Ford, G. (2017). Articulation of Military Earned College Credit into the University of North Carolina University System. Proceedings at the American Society for Engineering Education National Conference. Columbus, OH.

Shoghli, O. and Ford, G. (2017). Students’ first employment expectations in technology programs. Proceedings at the American Society for Engineering Education National Conference. Columbus, OH.

Steven S., Suk, S., and Ford, G. (2016). Characterizing Electrical Output of Bifacial Photovoltaic Modules by Altering Reflective Materials. Journal of Building Construction and Planning Research, 4(1).

Kim, T., Tae, S., Suk, S., Ford, G., and Yang, K. (2016) “Optimization System for Concrete Life Cycle Cost and Related CO2 Emissions.” Sustainable Engineering and Science. February, 2016.

Ford, G., and Ford, J. (2016). Translating United States military occupational specialties training into college credit. Proceedings at the American Society for Engineering Education National Conference. New Orleans, LA.

Lee, J., Tae, S., Shin, Suk, S., Yang, K., Ford, G., Smith, M., and Shoghli, O. (2015). A study of carbon emissions during building construction. Proceedings at the International Conference on Engineering and Architecture. San Francisco, CA

Park, M., Roh, S., Tae, S., Suk, S., Ford, G. and Smith, M. (2015). A study on the sustainable building technologies to performance of greenhouse gas emission reduction. SCOPUS Journal.

Gong, Y., Tae, S., Shin, S., Suk, S., Ford, G and Smith, M. (2015). Life Cycle Assessment Applied to Green Building Certification in South Korea. SCOPUS Journal.

Roh, S., Tae, S., Shin, S., Che, C., Suk, S., and Ford, G. (2015). Methods to improve BIM based estimations of major building material quantities in life cycle assessment. SCOPUS Journal.

Roh, S., Tae, S., Suk, S., Ford, G., and Shin, S. (2015) “Evaluating the embodied environmental impacts of major building tasks and materials of apartment buildings.” Renewable & Sustainable Energy Reviews

Roh, S., Tae, S., Suk, S., Ford, G., and Shin, S. (2015). “Development of a Building Life Cycle Carbon Emissions Assessment Program (BEGAS 2.0) for Korea’s Green Building Index Certification System.” Renewable & Sustainable Energy Reviews

Park, M., Tae, S., Suk, S., Ford, G., and Smith, M. (2015) “A Study on the Sustainable Building Technologies considering to Performance of Greenhouse Gas Emission Reduction.” International Conference on Sustainable Design, Engineering and Construction, Chicago, USA

Gong, Y, Tae, S, Suk, S, Ford, G, and Smith, M. (2015) “Life Cycle Assessment Applied to Green Building Certification in South Korea.” International Conference on Sustainable Design, Engineering and Construction, Chicago, USA

Ford, G., Ball, A., Tae, S., and Smith, M. (2015). Project based capstone course in an undergraduate construction management program. Proceedings at the American Society for Engineering Education National Conference. Seattle, WA

Ahn, Y., Kim, H., and Ford, G. (2014). An Integrative Literature Review of Sleep Disturbances on Construction Workers. Proceedings at the Conference for **Industrial and Systems Engineering Research. Montreal, Quebec, Canada**

Ford, G., and Suk, S., (2014). Church Energy Audits in the United States Proceedings at the Construction Research Congress National Conference. Atlanta, GA. (Submitted)

Ford, G., Ahn, Y., and Choi, D. (2014). Modular building for urban disaster housing: Case study of urban post-disaster housing prototype in New York. Fire Science Engineering. 28(6), p82-89.

[Mau, R., and Ford, G., (2014). University Education Dilemma: Challenge of Incorporating Alternate Views of Scholarship and Teaching.](http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29EI.1943-5541.0000201) [[Journal of Professional Issues in Engineering Education and Practice](http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29EI.1943-5541.0000201)](http://ascelibrary.org/toc/jpepe3/0/0)[. [10.1061/(ASCE)EI.1943-5541](http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29EI.1943-5541.0000201)](http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29EI.1943-5541.0000201)

Steffen, R., Suk, S., Ahn, Y., and Ford, G. (2013). Modeling Energy Generation by Grid Connected Photovoltaic Systems in the United States. Journal of Building Construction and Planning Research.

Kang, L., Suk, S., Ahn, Y. and Ford, G. (2013). Greenhouse Gas Emissions during Operation and Maintenance of Residential Buildings”. Proceedings at the International Conference on Sustainable Building. Seoul, Korea.

White, H., Cruz, L., Ellern, J., Ford, G., and Moss, H., (2012). Bound by tradition? Peer review and new scholarship: An institutional case study. Research in Higher Ed Journal

Ford, G., Kinard, C., and Sims, B., (2012). Measuring Educational Program Effectiveness Using the Associate Constructor’s Exam. Journal of Industrial Technology 28(1), p1-6

Ford, G., Fearrington, H., and Williams, J., (2012). Enrollments in graduate engineering programs for the next ten years. Proceedings at the Conference for Industry and Education Collaboration. Orlando, FL.

Ford, G., Steffen, R., and Ford, R., (2012). Student retention in the University of North Carolina System. Proceedings at the American Society for Engineering Education National Conference. San Antonio, TX.

Ford, G., McDaniel, W., and Ball, A., (2012). University and community college collaboration in North Carolina. Proceedings at the American Society for Engineering Education Southwest Section Conference. Starkville, MS.

Ford, G., and Buchanan, W., (2011). Developing an on-line environmental issues course for an American Council for Construction Education accredited program. Proceedings at the American Society for Engineering Education Southwest Section Conference. Houston, TX

Ball, A., Ford, G., and Miceli, F., (2011). Integrating project based learning through machine design, fabrication and testing. Proceedings at the American Society for Engineering

 Education National Conference. British Columbia, Canada (also presented paper at conference)

Ford, G., and Ball, A., (2011). The evolution of engineering and engineering technology educational programs in the United States. Proceedings at the American Society for Engineering Education National Conference. British Columbia, Canada (also presented paper at conference)

Ford, R., Ford, G., and McBride, J., (2011). The evolution of the Global Positioning System. Proceedings at the American Society for Engineering Education Southeast Section Conference. Charleston, SC (also presented paper at conference)

Ford, G., McDaniel, W., and Yanik, P., (2011). Analysis of the air conditioning systems in a blown films manufacturing plant in the southeastern United States. Proceedings at the American Society for Engineering Education Southeast Section Conference. Charleston, SC (also presented paper at conference)

Ferguson, C., Ford, G., and Bumgarner, R., (2011). A discussion of tort liability in engineering technology laboratories. Proceedings at the American Society for Engineering Education Southeast Section Conference. Charleston, SC (also presented paper at conference)

Ford, G. and Ferguson, C., (2010). Faculty student advising at Western

Carolina University. Proceedings at the American Society for Engineering

 Education Southeast Section Conference. Blacksburg, VA (also presented paper at conference)

Ford, G., Patterson, J., and Sims, B., (2010). Recruiting and retention

strategies for construction employers in the United States

Proceedings at the American Society for Engineering Education Southeast Section Conference. Blacksburg, VA (also presented paper at conference)

Ford, G., Patterson, J., and Bumgarner, R., (2010). Improving Statics

instruction in four-year technology programs. Proceedings at the American Society for Engineering Education Southeast Section Conference. Blacksburg, VA (also presented paper at conference)

Ford, G. and Ball, A., (2010). A case study: An energy audit for a small

municipality in North Carolina. Proceedings at the American Society for Engineering Education Southeast Section Conference. Blacksburg, VA (also presented paper at conference)

Ford, G. and Anderson, R., (2010). Developing a modern engineering

technology curriculum: A case study at Western Carolina University. Proceedings at the American Society for Engineering Education Conference. Louisville, KY

Ford, G. and Miers, R., (2010 ) Engagement & project based learning.

Proceedings at the American Society for Engineering Education Conference. Louisville, KY

Patterson, J. and Ford, G., (2010). A Holistic Approach to Hurricane Mitigation for

Residential Structures. Proceedings at the Associated Schools of Construction Conference. Boston, MA.

Ford, G. and Buchanan, W., (2010). Environmental scanning for industrial advisory

committee planning in a construction management educational program. Proceedings at the American Society for Engineering Education Midwest Section Conference. Lake Charles, LA.

Cruz, L., Ellern, J., Ford, G., Moss, H., and White, B., (2009). Recognition and

Reward: SOTL and the Tenure Process at a Regional Comprehensive University. Mountain Rise Journal 5(3). p1-27

Patterson, J. & Ford, G. (2009). Basic aspects of hurricanes for technology faculty in

the United States. Proceedings at the American Society for Engineering Education Southeast Section Conference. Marietta, GA

Patterson, J. & Ford, G. (2009). The damaging impacts of hurricanes upon coastal

structures. Proceedings at the American Society for Engineering Education Southeast Section Conference. Marietta, GA

Yanik, P., Ford, G. and Howell, B. (2009). An introduction to fuzzy logic applications

for robot motion planning. Proceedings at the American Society for Engineering Education Southeast Section Conference. Marietta, GA

Ford, G., Patterson, J., and Sims, B. (2009). How to determine construction project rain delay times using local rainfall databases in Asheville, North Carolina. Proceedings at the Construction Institute of the American Society of Civil Engineers. Portland, OR

Ford, G & Mau, R. (2008). University Freshman Retention in North Carolina. Proceedings at the American Society for Engineering Education Southeast Section Conference. Memphis, TN. (also presented paper at conference)

Ford, G & Miers, R (2008). A Brief Introduction to Environmental Scanning for Higher Educational Institutions in North Carolina. Proceedings at the American Society for Engineering Education Southeast Section Conference. Memphis, TN.

Ford, G. & Yanik, P. (2008). A fuels cost comparison of gasoline and electric powered vehicles. Proceedings at the American Society of Mechanical Engineering. Jacksonville, FL

Anderson, R., Ford, G. and Yanik, P. (2008). Service learning in technology programs at Western Carolina University. Proceedings at the International Conference on Engineering and Computer Education. Buenos Aires, Argentina

Ford, G. & Patterson, J. (2008). How to teach statics to four-year technology students. Proceedings at the International Conference on Engineering and Computer Education. Buenos Aires, Argentina

McDaniel, W., & Ford, G. (2007). An Innovative Student Engagement Project: Lessons Learned from a Log Cabin. Proceedings at the American Society for Engineering Education Southeast Section Conference. Louisville, KY.

Ford, G., McDaniel, W., & Ball, A. (2007). Global Warming at Asheville, North Carolina. Proceedings at the 3rd National Conference on Environmental Science and Technology. Greensboro, NC

**PROFESSIONAL MEMBERSHIPS/awards**

OSHA 502 Trainer for 30hr training.

Professional Engineering License, (Mechanical) State of South Carolina, 1992

Professional Engineering License, State of North Carolina, 2005

Waste Water Operator’s License, State of South Carolina, 1995

Infantry Braid, Infantry Officer’s Basic Course, Fort Benning, Georgia, 1985 (Graduated Infantry course with honors)

Paratrooper Wings, Airborne School, Fort Bragg, North Carolina, 1982

**PROFESSIONAL MEMBERSHIPS**

*Member,* American Society for Engineering Education, 2006-Present

*Member,* Society of Mechanical Engineers, 2006 - 2008

*Member,* Society of Automotive Engineers, 2004 – 2006

*Member,* South Carolina Teachers’ Association, 2001-2004

*Member,* Carolinas’ Air Pollution Control Association, 2006-2015