DEIRDRE D. RAGAN, Ph.D.
dragan@citadel.edu 843-953-2708 linkedin.com/in/deirdre-d-ragan

SELECTED HONORS AND AWARDS

All-Southern Conference Faculty of the Year	2023
Undergraduate Teaching Excellence James A. Grimsley, Jr. Award	2022
Phi Kappa Phi Honor Society	2022
National Collegiate Honors Council Faculty Award: Developing Course Material	2021
Omicron Delta Kappa Leadership Honor Society	2019
Lowcountry Engineer of the Year (Charleston Engineering Joint Council)	2019
Oxford ISGAP Scholar (Oxford University, St. John's College, England)	2019
Excellence in Teaching Award Graduate Student Runner-Up (UCSB)	1997
Fulbright Research Fellowship in Sweden	1995

EDUCATION

University of California at Santa Barbara, College of Engineering (Santa Barbara, CA)

Ph.D. in Materials: "The Effect of Cation Dopants on Phase Transformations in Alumina" 1999

M.S. in Materials: "Decohesion of Thin Films in Microelectronic Circuits" 1995

Rice University, School of Engineering (Houston, TX)

B.S. in Materials Science and Engineering 1992

EXPERIENCE

The Citadel Honors Program (Charleston, SC) 2014 – Present

Founded in 1987, The Citadel Honors Program focuses on building a community of academically curious learners, offering interesting and challenging courses, and developing each student for their future career.

Director 2018 – Present

Areas of focus include

- Mentor: Meet with each Honors Program student monthly for personal and professional development, focusing on aptitudes, interests, and experiences needed for post-graduate success; Help develop plans for study away programs and research projects
- Advise: Verify progress towards graduation and Honors Program completion, verifying major academic progress and accuracy of records presented in DegreeWorks
- Pedagogy: Engage in ongoing education for continual improvement in teaching approaches and methods to boost Honors course engagement and learning; Provide input and instruction to faculty teaching Honors Program courses
- Recruit: Identify and recruit eligible high school students; Act as liaison for prospective students and parents for the Honors Program and The Citadel; Serve as Chair of the Scholarships Committee; Work collaboratively with Financial Aid and Admissions to construct processes for identifying and interacting with high potential applicants
- Assess: Ensure alignment between course objectives and program objective; Annually measure outcomes and plan for the coming academic year; Summarize and report results to college leadership
- Plan: Work with other departments to organize Honors Program classes for future semesters; Create courses within Banner
- Instruct: Develop and teach Honors courses; Utilize Canvas Learning Management System to organize and communicate assignments and grades to students

- Involve: Engage in open dialogue, interaction, and involvement of alumni; Write recommendation letters and evaluate proposals for young alumni as needed
- Operations: Maintain Honors Program operations including all aspects of processes and procedures, budgeting, and supervising staff
- Service to students: Serve as faculty academic advisor to ~100 residential students
- Service to faculty: Serve as mentor to new faculty
- Service to college: Deliver Conflict Resolution and Diversity workshops to faculty, staff, and students using the National Coalition Building Institute curriculum; Chair of the Scholarship Committee
- Honors Community Involvement: Participate in southern region and national organizations; publish, present, and serve to enhance the Honors community

Honors Undergraduate Courses Developed and Taught:

Freshman Honors Seminar

A Matter of Thinking	Fall 2022
Logic, Learning, Belief, and Persuasion	Fall 2021
Periodic Explorers: Exploration and Innovation	Fall 2019, 2020

Honors Special Topics Seminars for upperclassmen

Bias, Information, and Decision Making	Spring 2023
Factfulness	Spring 2022
Cultures and Controversy	Spring 2021
Controversy and Critical Thinking	Spring 2019

Honors Tutorials: Personal and Professional Development Fall 2018 – Present

Additional Institution Courses Taught:

First-year Experience in Honors	Fall 2018 – 2022
Ethics in Leadership	Fall 2018, 2019, 2022

Incoming Director: Begin to assume Honors Program Director responsibilities 2017 – 2018

Assistant: Serve as sole support staff to Honors Program Director 2014 – 2018

Areas of focus included

- Relationships: Develop rapport and understanding of Honors Program students such that they view the Honors Program office as a compassionate, dedicated resource for success
- Communication: Ensure that all communications regarding program status, events, and course announcements are relevant, accurate, and updated
- Data Management: Create metrics for all Honors Program students and applicants; Maintain complete, error-free records on cadets and prospective students

The Citadel Mechanical Engineering Department (Charleston, SC) 2017 – Present

Assistant Professor 2020 – Present

Visiting Assistant Professor 2018 – 2020

Adjunct Professor 2017 – 2018

Areas of focus include

- Teaching: Instruct undergraduate and graduate students; Utilize Canvas Learning Management System to organize and communicate assignments and grades to students

- Curriculum development: Update existing courses to keep content relevant and impactful; Develop new courses to extend student options both within Mechanical Engineering and within core curriculum offerings
- Service: represent of the School of Engineering at college and community events
- Mentor and Advise: Provide academic advising to students; Encourage student involvement in research

Undergraduate Courses:

Introduction to Materials	Fall 2017, 2018, 2019, 2021, 2022
Advanced Materials	Fall 2020, Spring 2023
Engineering Design	Spring 2018, 2019, 2020, 2022
Grand Challenges of the 21st Century	Spring 2021

Graduate Courses:

Fracture and Fatigue	Summer 2019, Spring 2020

Providence Preschool (Charleston, SC)

Director 2012 – 2014

Responsibilities: Create a positive, welcoming school environment for parents and students; Develop age-appropriate curriculum for toddler to Pre-K classrooms; Balance resources to provide a quality environment while minimizing costs; Train and Manage all personnel; Maintain budget records; Create and distribute monthly newsletters and other regular communication with school families; Report to Board of Directors.

Lead Teacher, Kindergarten Readiness (4K) class 2011 – 2014

Responsibilities: Design and implement age-appropriate, developmental class lessons to ensure continual progress toward kindergarten readiness; Utilize multiple instruction techniques to assist students with different learning styles; Create a culture of open communication with parents; Collaborate with and mentor assistant teacher.

Creative Learning Center for Very Young Children (Winston-Salem, NC)

Lead Teacher, 2 to 3-year old's classroom 2007 – 2008

Responsibilities: Create opportunities for learning through play with age-appropriate materials; Develop foundational language and math literacy skills with books, art, blocks, and other toys.

PPG Industries, Inc. (Harmarville, PA)

Development Project Engineer, Glass New Product Development 2001 – 2004

Responsibilities: Conceive and fabricate nanotechnology-related products for automotive and architectural glass; Focus on process optimization of surface treatments done in situ during glass formation; Work with development team to create prototypes for design selection; Drive technology transfer with national laboratories; Lead educational outreach program to regional at-risk students.

PPG Industries, Inc. (Allison Park, PA)

Chemist, Automotive Powder Coatings 1999 – 2001

Responsibilities: Explore and optimize the incorporation of inorganic nanoparticles into polymeric coatings; Make and evaluate the performance of various polymeric prototypes when subjected to extreme environmental conditions; Direct a university research project (at the University of Arkansas) on process optimization of electrostatic application parameters and chemical formulation of polymeric coatings

University of California, Santa Barbara
Graduate Researcher, Materials 1996 - 1999
Responsibilities: Develop thin film fabrication technology and testing methodology for measuring the effect of ions on crystal phase transformations.
Dean of Engineering Search Committee 1998
Invited to be the sole graduate representative on committee
Graduate Teaching Assistant, Materials (Course: Graduate Thermodynamics) 1996 - 1997
Responsibilities: Hold weekly office hours to assist graduate students; Host study sessions; Design study guides; Lead class in the absence of the professor

Uppsala University (Uppsala, Sweden) 1995 - 1996
Visiting Fulbright Researcher, Solid-State Physics
Responsibilities: Investigate the fabrication and behavior of various electrochromic materials; Create functional prototypes for marketing purposes; Collaborate with multiple researchers in other disciplines to characterize material behavior.

University of California, Santa Barbara (Santa Barbara, CA) 1992 - 1995
Graduate Researcher
Responsibilities: Create and utilize microelectronics processing techniques for determining the weakest interface in a thin film stack.

Rice University Admissions Office (Houston, TX) 1991 - Present
Alumni Recruiter and Interviewer
Responsibilities: Act as a regional representative of the university; Conduct interviews of prospective students; Provide information about the university at regional college fairs.

Texas Instruments, Inc. (Houston, TX) summer 1991
Summer Intern
Responsibilities: Verify the failure of fabricated circuits due to voltage cycling.

Los Alamos National Laboratory (Los Alamos, NM) summers 1988-90, 1992-1994
Undergraduate Researcher
Responsibilities: Measure the behavior of materials when subjected to static high-pressures; Maintain a Department of Energy Q-Level (Top Secret) Clearance

---

PRESENTATIONS (KEYNOTES, PANELS, WORKSHOPS, and POSTERS)
Doing Honors at Small Colleges: Challenges, Opportunities, and Data 2022
National Collegiate Honors Council Conference (Dallas, TX)

Students in Honors: Introducing Yourself/Making Elevator Pitches 2022
National Collegiate Honors Council Conference (Dallas, TX)

Beginning in Honors Workshop 2022
National Collegiate Honors Council Conference (Dallas, TX)

"Prepare for the Journey" 2022
Convocation Address to The Citadel Class of 2026 (Charleston, SC)

"Using Web-based Textbook to Improve Students' Understanding of Materials Science" 2022
American Society of Engineering Education Southeastern Section Conference (Charleston, SC)

"Humanitarian Development and Engineering Design as a Foundation for Multidisciplinary Learning" 2021
National Collegiate Honors Council Conference (Orlando, FL)

"Change?" 2021
Omicron Delta Kappa Keynote Address (Charleston, SC)

"Examining the Impact of Collaborative Homework on Student Performance in an Engineering Materials Course" 2021
American Society of Engineering Education Southeastern Section Conference (virtual)

"Solar Powered Dehydrator" 2021
American Society of Engineering Education Southeastern Section Conference (virtual)

"Potentials and Limitations of Face to Face and Hybrid Teaching Modes" 2021
American Society of Engineering Education Southeastern Section Conference (virtual)

"Appreciating Diversity" multiple workshops in 2021 - Present
National Coalition Building Institute (Charleston, SC)

"Controversy and Conflict Resolution" multiple workshops in 2020 - Present
National Coalition Building Institute (Charleston, SC)

"The Impact of Storytelling" multiple conferences in 2020 - 2021
ReStart Conference (national)

"Intentional and Efficient Networking" 2020
Ellevate Network Lunch&Learn (Charleston, SC)

"Game-Based Tools for Learning" 2020
CEITL-DE Faculty-Development Training (Charleston, SC)

"The Citadel: Not Your Typical College" 2019
ISGAP Conference (Oxford, England)

"Temperature Comparison of Hybrid, Sealed, and Steel Ball Bearings" 2018
Summer Undergrad Research Project poster (Charleston, SC)

"Building Your Network" 2018
ReStart Workshop (Mt. Pleasant, SC)

"Job Searching" 2018
ReStart Conference (Mt. Pleasant, SC)

"A Structured Course in Personal and Professional Development" 2017
Southern Regional Honors Council Conference (Asheville, NC)

"Dream Big: Discover Your Passion" 2017
Seacoast TEDTalx (Charleston, SC)

"Superstar Interviewing" 2015 - 2018
ReStart Conference (Mt. Pleasant, SC)

"Elementary School Science Fairs: Parent Involvement" 2010
Forsyth County Schools (Winston-Salem, NC)

"Powder Electrostatics" 1999
PPG Industries, Inc., (Pittsburgh, PA)

"The Effect of Cation Dopants on Phase Transformations in Alumina" 1999
University of California at Santa Barbara

"Phase Transformations in Alumina Thin Films" 1998
PPG Industries, Inc. (Pittsburgh, PA)

"Using Time Resolved Reflectivity to Monitor Planar Transformations in Alumina" 1997
University of California at Santa Barbara (Santa Barbara, CA)

"An Investigation of Electrochromic Ni-Oxide Based Films" 1996
University of California at Santa Barbara (Santa Barbara, CA)

"Electrochromic Ti-Ce Oxides" 1996
Electrochemical Society (San Antonio, TX)

"Electrochromic Research at Uppsala University" 1996
PPG Industries, Inc. (Pittsburgh, PA)

"An Investigation of NiO_xH_y Films" 1996
Uppsala University (Uppsala, Sweden)

"Decohesion of Thin Films in Microelectronic Circuits" 1995
University of California at Santa Barbara (Santa Barbara, CA)

"A Novel Method for Determining Strain Energy in Thin Films" 1994
University of California at Santa Barbara (Santa Barbara, CA)

"Electrochromism of WO_3" 1994
University of California at Santa Barbara (Santa Barbara, CA)

"Ruby Fluorescence: A Technique for Measuring Stress" 1993
University of California at Santa Barbara (Santa Barbara, CA)

"The Use of Silicone Fluid as a Pressure Medium in Diamond Anvil Cells" 1993
Los Alamos National Laboratory (Los Alamos, NM)

PUBLICATIONS

"Assessing Students' Metacognitive Skills in a Summer Undergraduate Research Program", S. Ghanat, D. Garner, T. Wittman, M. Hefner, D. Ragan, T. Le-Vasicek, E. Bierman, B. Adair-Hudson, proceedings of American Society of Engineering Education Conference, June 26-29, 2022

Leadership 101: The First-Year Experience, T. Shealy, E. Connor, D. Ragan, 11th edition, published June 2022

"Using Web-based Textbook to Improve Students' Understanding of Materials Science", M. Bubacz, D. Ragan, proceedings of 2022 American Society of Engineering Education Southeastern Conference, March 13-15, 2022

"Student-Instructor Academic Relationships: Effects of Background and Culture", G. Elamin, M. Bubacz, A. DeVoria, R. Rabb, D. Ragan, P. Niksiar, proceedings of 2022 American Society of Engineering Education Southeastern Conference, March 13-15, 2022

"Emerging Ways to Conquer Education Challenges in Times of COVID-19 and Their Influence on Students' Academic Performance", P. Niksiar, M. Bubacz, D. Ragan, G. Elamin, P. Bass, *Journal of Higher Education Theory and Practice* Vol. 21(13) 2021

"Examining the Impact of Collaborative Homework on Student Performance in an Engineering Materials Course", D. Ragan, J. Geathers, proceedings of 2021 American Society of Engineering Education Southeastern Conference, virtual conference, March 8-11, 2021

"Solar Powered Dehydrator", J. Plumblee, E. Bierman, D. Ragan, proceedings of 2021 American Society of Engineering Education Southeastern Conference, virtual conference, March 8-11, 2021

"Potentials and Limitations of Face to Face and Hybrid Teaching Modes", M. Bubacz, P. Niksiar, G. Elamin, D. Ragan, P. Bass, proceedings of 2021 American Society of Engineering Education Southeastern Conference, virtual conference, March 8-11, 2021

"Student Perception on Ethics and Intercultural Issues in Introduction to Mechanical Design Course", M. Bubacz, D. Ragan, K Skenes, proceedings of 2020 American Society of Engineering Education Southeastern Conference, Auburn, Alabama, March 8-10, 2020

"Introducing Competition to Improve Design Aptitudes in Introduction to Mechanical Design Course", M. Bubacz, D. Ragan, N. Washuta, K Skenes, proceedings of 2020 American Society of Engineering Education Southeastern Conference, Auburn, Alabama, March 8-10, 2020

"Comparison of Mentors' and Mentees' Perceptions of Mentees' Research Skill Gains at The Citadel", S. T. Ghanat, M. K. Zanin, D. Garner, D. Ragan, J. M. Plumblee, D.B. Bornstein, J.H. Lewis, proceedings of American Society of Engineering Education 126th Annual Conference and Exposition, Tampa, Florida, June 16-19, 2019

"Small Mentoring Efforts that Make a Big Difference for Retention," R. Rabb, R. Welch, W. Davis, D. Ragan, J. Geathers, proceedings of American Society of Engineering Education 126th Annual Conference and Exposition, Tampa, Florida, June 16-19, 2019

"A Structured Course in Personal and Professional Development," D.D. Ragan, *Honors in Practice* **14** (2018)

"How to Prepare for a Science Fair: A Guide for Parents," D.D. Ragan, Forsyth County School District (2010)

"The effect of yttrium and erbium ions on the epitaxial phase transformations in alumina," D.D. Ragan, T. Mates, D.R. Clarke, *J. Amer. Ceramic Society* **86**, 541 (2003)

"Electrochromic Ni oxide films studied by magnetic measurements," D.D. Ragan, P. Svedlindh, C.G. Granqvist, *Solar Energy Materials and Solar Cells* **54**, 247 (1998)

"Optically passive counter electrodes for electrochromic devices: transition metal-cerium oxide thin films," A. Azens, L. Kullman, D.D. Ragan, C.G. Granqvist, *Solar Energy Materials and Solar Cells* **54**, 85 (1998)

"Magnetic measurements on electrochromic Ni-oxide-based films," D.D. Ragan, P. Svedlindh, C.G. Granqvist, *J. Appl. Phys.* **82**, 1759 (1997)

"Cerium-containing counter electrodes for transparent electrochromic devices," L. Kullman, M. Veszelei, D. D. Ragan, J. Isidorsson, G. Vaivars, U. Kanders, A. Azens, S. Schelle, B. Hjorvarsson, C. G. Granqvist, in *Optical Organic and Semiconductor Inorganic Materials*, E. A. Silinsh, A. Medvid, A. R. Lusis, and A. O. Ozols, eds., Proc. SPIE 2968, 219–224 (1997).

"Electrochromic properties of Ti-Ce oxides: the effect of varying stoichiometry," A. Azens, L. Kullman, D. D. Ragan, M. Strømme Mattsson, and C. G. Granqvist, in *Electrochromic Materials III*, K.-C. Ho, C. B. Greenberg, and D. M. MacArthur, eds., Electrochem. Soc. Proc. **96-24**, 218–228 (1997).

"Measurement of the Fracture Energy of SiO_2/TiN Interfaces Using the Residually-Stressed Thin-Film Micro-Strip Test." X. Guanghai, D. D. Ragan, D. R. Clarke, M.Y. He, Q. Ma, and H. Fujimoto, *MRS Proceedings* 458 (1996)

"Optical and electrochemical properties of dc magnetron sputtered Ti-Ce oxide films," A. Azens, L. Kullman, D. D. Ragan, C. G. Granqvist, B. Hjorvarsson, and G. Vaivars, *Appl. Phys. Lett.* **68**, 3701–3703 (1996)

"Silicone fluid as a high-pressure medium in diamond anvil cells," D.D. Ragan, D. Schiferl, D.R. Clarke, *Rev. Sci. Instr.* **67**, 494 (1996)

"Calibration of the ruby R1 and R2 fluorescence shifts as a function of temperature from 0-600 K," D.D. Ragan, R. Gustavsen, D. Schiferl, *J. Appl. Phys.* **72**, 5539 (1992)

"Calibration of the nitrogen vibron pressure scale for use at high temperature," S.C. Schmidt, D. Schiferl, A.S. Zinn, D.D. Ragan, D.S. Moore, *J. Appl. Phys.* **69**, 2793 (1991)

PATENTS

Display Panel USPTO# 8,629,610; Issued Jan. 2014
Mehran Arbab, Adam D. Polcyn, Deirdre D. Ragan, Michael Buchanan

Material having laser induced light redirecting features USPTO# 8,547,008; Issued Oct. 2013
Mehran Arbab, Adam D. Polcyn, Deirdre D. Ragan

Coating compositions providing improved mar and scratch resistance and methods of using the same USPTO# 8,258,225; Issued Sept. 2012
Karen A. Barkac, Anthony M. Chasser, Roy E. Dean, Mildred Lisa Perrine, Deirdre D. Ragan, Karen S. Rechenberg, John R. Schneider

Article having nano-scaled structures and a process for making such article
Mehran Arbab, Deirdre D. Ragan, Songwei Lu USPTO# 7,851,016; Issued Dec. 2010

Organic solvent-free film-forming compositions, multi-layer composite coatings, and related methods USPTO# 7,241,830; Issued July 2007
Charles M. Kania, Roxalana L. Martin, Carolyn A. K. Novak, Thomas R. Hockswender, Mark A. Tucker, Mary Beth Grolemund, Deirdre Ragan, Alicia Williams

SERVICE

Service to College

Scholarships Committee Chair	2018 – Present
Dept. of Mechanical Engineering faculty search committee	2021 – Present
National Coalition Building Institute, workshop facilitator	2019 – Present
Faculty Senate Ad Hoc Committee on Reading Day	2022 – Present
New Faculty Mentor	2019 – Present
Commencement Ceremony Faculty Line Leader	2019 – Present
Public Speaking Competition Judge	2020 – Present
Distinguished Scholars Program Advisory Board	2018 – Present
Fellow of the James B Near, Jr., USAF, '77 Center for Climate Studies	2020 – Present
Citadel Women's Network Advisory Board	2020 – Present
Purpose&Growth volunteer and student coordinator (Australia/ Charleston, SC)	2020 – 2022
Thesis Committee, Citadel School Psychology Ed.S. candidate	2021 – 2022
ASEE- SE conference planning team	2021 – 2022
School of Engineering Vision Task Force co-chair	2021
Summer Virtual Orientation Team Leader	2020, 2021
Citadel Leadership Day Team Leader	2017, 2018, 2021
Dept. of Project Management faculty search committee	2020
Judge at The Citadel Students of Excellence poster competition	2017, 2018, 2022

Service to Students

Sierra Company Faculty Academic Advisor	2019 – Present
Senior Design Team Advisor (2 teams)	2022 – Present
Leadership Day Junior Class Experience	2019, 2020, 2022
Summer Undergraduate Research Experience (SURE) Research Mentor	2018, 2021
Mock Interviewer for The Citadel Career Center	2017
Co-Advisor for the NCBI student club	2021 – Present
Advisor for The Citadel Honors Program student club	2014 – Present

Service to Community

National Coalition Building Institute, trainer/small group leader (Carolinas)	2019 – Present
National Collegiate Honors Council (national)	
Beginning in Honors Mentor	2022 – Present
Awards & Grants Committee	2020 – Present
Small Colleges Committee	2020 – Present
Conference Planning & Review Committee	2018 – Present
Student Research Committee	2018 – Present
Judge of STEM-related student research posters	2017 – Present
Student Moderator Coordinator	2017 – Present
Introduce A Girl to Engineering Volunteer (Charleston, SC)	Februarys: 2018 – Present
ReStart (Charleston, SC) Leadership team and mentor	2014 - 2022

A not-for-profit organization, equipping those in career transition with powerful tools to enhance their search for employment today or in the future.

Urban Heat Mapping: HeatWatch (Charleston, SC)	summer 2021, 2022
IIE Project GO! Application Reviewer (national)	2021
SC State Science Olympiad Volunteer Event Facilitator (Charleston, SC)	2019, 2020
STEM Festival Volunteer (Charleston, SC)	2019, 2020
Storm the Citadel Engineering Competition Volunteer (Charleston, SC)	2019 – Present
Middle School Robotics Competition Volunteer Judge (Charleston, SC)	2018

Seacoast Church (Mt. Pleasant, SC)	2016 – 2019
Group Leader for middle school girls	
Daniel Island School (Charleston, SC)	2011 – 2017
Math and Reading Tutor	
Sherwood Forest Elementary School (Winston-Salem, NC)	2009 – 2011
Science Fair Coordinator	
Board Member, PTA	
Junior League of Winston-Salem	2004 – 2011
Board Member	
Marketing and Communications Chair	
PPG Industries, Inc. Community Outreach	2003 – 2004
Beginning with Books (Pittsburgh, PA)	2002 – 2004
Literacy Tutor for high-risk youth	
Principal for a Day (Pittsburgh, PA)	2003
Junior League of Pittsburgh (Pittsburgh, PA)	2001 – 2004
Board Member	
Community Projects Chair	
Leadership Development: Pittsburgh selected participant	2000
Literacy Initiative (Santa Barbara, CA)	1996 – 1998
Literacy Tutor – Adults with learning disabilities	

TRAINING/CONTINUING EDUCATION

Program Assessment (workshop)	May 2022
General Education Assessment (workshop)	May 2022
Engineering Unleased! (conference)	January 2022
Faculty Assessment (workshop)	June 2021
Smart Materials and Devices for Electronic Textiles (seminar)	June 2021
Multifunctional materials for emerging technologies (seminar)	May 2021
Fostering Ecosystems for Impact: Enabling Technologies Advancing Human Infrastructure (seminar)	January May 2021
Giving Voice to Values: The "How" of Teaching Professional Ethics (seminar)	March 2021
Free Speech on Campus: Is it in Danger? (seminar)	February 2021
Hybrid Teaching (workshop)	February 2021
Increasing Women in Mechanical Engineering (workshop)	January 2021

PROFESSIONAL MEMBERSHIPS

American Society for Engineering Education
Society of Women Engineers
Engineers Without Borders
Engineering for Change
National Collegiate Honors Council
Southern Regional Honors Council

CERTIFICATIONS

National Coalition Building Institute: *Resolving Conflict and Building Consensus*
National Coalition Building Institute: *Welcoming Diversity: Leadership in Diversity and Respect*
Mini-ExCEEd Engineering Education
Online Teaching Academy
Critical Problem-Solving Skills
Design of Experiments
Six Sigma Methodology
Understanding Learning Styles