

# Southeastern Electrical and Computer Engineering Department Heads Association (SECEDHA)

**Annual Meeting – Virtual  
Friday, October 30 2020**

**Zoom Link: <https://southalabama.zoom.us/j/92532491665>  
All times Local (Central Time Zone)**

**University of South Alabama  
Mobile Alabama**

Time	Activity	Lead
8:30 – 9:00 am	Welcome Remarks: Ms. Lynne Chronister, Vice President for Research and Economic Development, Univ. of South Alabama  SECEDHA Member Introduction	Hulya Kirkici
9:00 am	Welcome Remarks: Dr. Tony Waldrop, President, University of South Alabama	Hulya Kirkici
9:05 – 9:50 am	Online labs and online “hands-on” experience for students (COVID Impact)  <i>Panelists:</i> Ryan Beasley, Undergraduate Lab Coordinator, Purdue University  Fred Beyette, Chair, University of Georgia  Leslie Birch, Lab Coordinator, Detkin Lab., University of Pennsylvania  Casey Smith, Assistant Director of Instructional Support, University of Illinois Urbana-Champaign	Jerry Trahan
9:50 – 10:35 am	Senior Design experience in virtual teaching (team work and design projects) – Round table discussion.  <i>Panelist:</i> John Peebles from The Citadel	Mark Nelms

10:35– 10:45 am	Break	All
10:45 – 11:30 am	Tools and community support for online teaching – Round table discussion  <i>Panelist: Dan Stancil, North Carolina State University - Overview of RECET project</i>	Mike Johnson
11:30 – 12:30 pm	Welcome Remarks Dr. Andrea (Andi) M. Kent, Interim Provost and Senior Vice President, Univ. of South Alabama  Presentation: Topic: Diversity and Engineering Education  Introduction by: Melissa Baumann, Provost and Chief Academic Officer, Xavier University  Guest Speaker: Julie P. Martin, Ph.D., F. ASEE Associate Professor of Engineering Education The Ohio State University	Hulya Kirkici  Melissa Baumann  And Julie P. Martin
12:30 – 1:00 pm	Lunch break	All
1:00 – 1:30 pm	Welcome from Dr. John Usher, Dean of Engineering, University of South Alabama  Virtual tour of the college and department labs and facilities	Hulya Kirkici
1:30 – 2:30 pm	SECEDHA Business Meeting  <ul style="list-style-type: none"> <li>• ECEDHA and the dues increase – update from ECEDHA Board member(s) or the subcommittee?</li> <li>• ABET Visit</li> <li>• SECEDHA Survey</li> </ul>	Hulya Kirkici  Zhihua Qu  Mike Johnson
2:30 – 2:45 pm	New and Old Business  Meeting Adjourn	Hulya Kirkici  All

**SCEEE Meeting  
Same Zoom Meeting Link**

<https://southalabama.zoom.us/j/92532491665>

2:45 pm – 3:15 pm	SCEEE General Meeting <ul style="list-style-type: none"><li>• Registering SCEEE board as a not-for-profit</li><li>• Other matters</li></ul>	Mark Nelms and Zhihua Qu
3:15 pm – 3:45 pm	SCEEE Directors Meeting (All welcomed to stay and observe)	Mark Nelms and Zhihua Qu
3:15 pm – 4:00 pm	Meeting Adjourned	All

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**Invited Presentation**

**Creating Systemic Change by Dismantling Deficit Thinking for Underrepresented Students in Electrical and Computer Engineering**

**Julie P. Martin, Ph.D., F. ASEE**

Electrical and computer engineering professionals have significant roles to play in solving 21st Century engineering challenges. We know that diverse teams create better solutions, and yet four decades of diversity efforts in higher education have failed to produce the diversity of talent needed to address today’s complex challenges. One reason for this is the deficit-minded thinking that underlies much educational research and practice. Deficit thinking is person centered, and what we colloquially might call a “fix-the-student” mentality. Deficit thinking blames students, their families, communities, and/or their culture for their underperformance while holding educational institutions, faculty, inequitable policies and practices faultless. Most recruitment and retention programs for underrepresented engineering students are inadvertently deficit-oriented, focusing on individual students and interventions to “fix” their perceived deficits through activities such as tutoring, advising, or mentoring. The problem with this approach is that it implies that when we simply support individual students, the issue underlying their underrepresentation will be solved. In fact, when we assist individual students, the inequitable structures that necessitate their support remain uncontested.

Likewise, the vast majority of published research on underrepresentation in engineering education is either explicitly or implicitly deficit-based. Research often focuses on why underrepresented students underperform or leave the field. We know less about why underrepresented students succeed in the field.

Systemic change is necessary to tackle the complexity of recruiting and retaining electrical and computer engineering students who have been marginalized by the education system. In this talk, Dr. Martin calls for research and interventions that purposefully employ asset-based approaches and recognize the multiple domains of students' lives. Research and interventions that address systemic inequities—rather than focus on perceived deficits of students—are necessary in order to achieve lasting outcomes. The shift to asset-based perspective will not be easy as it necessitates deconstructing practices, beliefs, and policies.

In this seminar, we will: (1) explore the idea of deficit thinking in education (2) learn about asset-based frameworks such as community cultural wealth (3) think about how we can begin to transform our educational systems through asset-based approaches to student success and a focus on institutional change.

### **Biography:**



Julie P. Martin is an associate professor of Engineering and Science Education at The Ohio State University. She is a Fellow of the American Society for Engineering Education (ASEE) and the new editor-in-chief of the *Journal of Women and Minorities in Science and Engineering* and Dr. Martin's research agenda focuses on diversity, equity, and inclusion in engineering education.

Prior to joining the faculty at OSU in 2019, Dr. Martin was a program director of Engineering Education and Centers Division (Directorate for Engineering) at NSF. While at NSF, she managed the Engineering Education portfolio which includes \$2M Revolutionizing Engineering Department (RED) grants supporting teams that serve as national exemplars of organizational culture change. In 2018, she worked on an interagency group headed by the White House Office of Science and Technology Policy to write the 5-Year STEM Education Strategic Plan for the federal government. She has held faculty appointments at Clemson University, Virginia Tech, and University of Houston, where she was the Director of Recruitment and Retention for the Cullen College of Engineering.

Over the last 15 years, Dr. Martin has held a variety of national leadership positions in ASEE and Women in Engineering ProActive Network (WEPAN), including national president of WEPAN. She has been recognized by both organizations for her distinguished service. She holds a BS in Materials Science and Engineering from North Carolina State University and a PhD in the same field from Virginia Tech.