

Seminar Series
School of Materials Science and Engineering
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5:00 PM – Room 200 Olin Hall

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With the establishment of the Department of Engineering and Science Education, Clemson University is moving to the forefront of national efforts in the emerging field of engineering education. This presentation describes characteristics of rigorous engineering education research for those new to the field, and presents details of a mixed-methods study by the speaker. The study employed a social cognitive theoretical framework to investigate the relations of ethnicity to female students' perceptions and experiences related to engineering, as well their selection and persistence in undergraduate engineering studies. An ethnically diverse sample of female engineering undergraduates at an urban research university completed an online survey (N=160) and participated in semi-structured interviews (N=37). Results revealed that participants of all ethnicities perceived strong institutional and peer support in this diverse learning environment. Additionally, differences in participants' perceived barriers for achieving engineering educational and career plans were found based on ethnicity and parental level of education.