“Augmenting Chemical Engineering Education to Maximize Real-World Impact”

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Abstract: The problems that the world depends on engineers to solve continue to increase in challenge and complexity. Chemical engineers have been at the forefront of maneuvering this complexity and will continue to be, given the depth and breadth of simultaneously applied knowledge students learn and practitioners execute in our field. This seminar will simulate a lecture in the first quarter of a capstone chemical engineering course. The course uses experiential education techniques; it refreshes content from previous chemical engineering fundamentals, adds relevant real-world application examples, and project and team management skills that students apply to the capstone project, and throughout their careers as successful chemical engineers.

Biosketch: Dr. Ebonée Williams earned her B.S. and Ph.D. in Chemical Engineering from Brown University and the University of Washington, respectively. She also has a Masters in Industrial Business Management from the Lille Business School in France. Dr. Williams has a background in advanced polymer composites research with emphasis on vacuum assisted resin transfer molding and polynanomeric composite application in aerospace. Dr. Williams has hosted polymer composite training sessions for FAA inspectors, Boeing engineers and college students; she has taught both undergraduates and graduates in the discipline, as well. Currently, she serves as the inaugural Executive Director of the Bernard and Sophia Gordon Engineering Leadership Center, creating ambassadors for engineering by strengthening the leadership skills of engineers at all levels. Dr. Williams has served as lecturer in the Jacobs School of Engineering for over a decade. Dr. Williams takes pride in her ability to provide efficient solutions to complex problems ranging from chemical processes to student development and education.