Benjamin Ahn is a Postdoctoral Associate at the Massachusetts Institute of Technology (MIT), leading engineering education research projects from the MIT-Singapore University of Technology and Design (SUTD) collaboration. He currently leads the efforts in (1) the development, implementation, and evaluation of a summer undergraduate leadership program for MIT and SUTD students, and (2) the identification and evaluation on the benefits of international exchange programs for undergraduate students.

Benjamin obtained a B.E. in Aerospace Engineering from the University of New South Wales (Australia), a M.S. in Aeronautics and Astronautics from Purdue University, and a Ph.D. in Engineering Education, also from Purdue University. Benjamin’s research has been published in journals such as the Journal of Engineering Education and the Journal of Propulsion and Power.

In this seminar, I will discuss my experiences (1) designing curricula for engineering students, (2) creating assessment tools to measure engineering students’ professional skills, and (3) implementing active learning pedagogy in engineering classrooms. Based on these experiences and my training in Engineering Education and Aerospace Engineering, I will then share envisioned contributions to the Aerospace Engineering department with respect to curricular, assessments and pedagogy innovations. Lastly, I will discuss Engineering Education research studies that I would like to pursue based on these innovations. My findings can both strengthen the educational experiences for aerospace engineering students and continue to advance the aerospace engineering program at Iowa State University.