

TEACHING SEMINAR

Bending

THURSDAY, October 10TH, 2:00 - 2:50 PM

ARMS B071 OR VIA [WEBEX](#)

FARZAD SHARIFPOUR

Lecturer Candidate

ABSTRACT

A solid understanding of the principles of mechanics of materials is crucial for grasping how aerospace structures endure loads and maintain their integrity. This teaching seminar will focus on the concept of Bending, which is a vital topic in Chapter 5 of the Aeromechanics II course (AAE 204). The seminar aims to provide students with the theoretical foundation and concepts necessary to understand the behavior of deformable bodies when subjected to bending moments. Through interactive examples and visual demonstrations, students will learn to apply these concepts to real-world aerospace engineering challenges.

The seminar will delve into the fundamentals of bending, covering key topics such as:

- Curvature of beams
- Longitudinal strains in beams
- Normal stress in beams

BIOGRAPHY

Farzad Sharifpour is a postdoctoral fellow specializing in the mechanics of composite materials, with a focus on aerospace engineering applications. He holds a B.Sc. from K.N. Toosi University of Tech. (2013), an M.Sc. from Iran University of Sci. and Tech. (2015), and a Ph.D. from the University of Waterloo (2022). His doctoral research, supervised by Prof. John Montesano, was recognized as the Best Ph.D. Thesis in Canada (2023) by the Canadian Association for Composite Structures and Materials. He has held postdoctoral fellowships at the University of British Columbia, under the guidance of Prof. Anoush Poursartip (2022-2024). Currently, he holds a Safran postdoctoral fellowship at Polytechnique Montréale (2024-). Farzad has taught undergraduate and graduate courses and his teaching interests span Structure and Materials, Design, and Manufacturing. His teaching philosophy emphasizes critical thinking and practical problem-solving, combining lectures with hands-on projects to encourage collaboration and active learning.



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