



**STEVENS INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING**

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Carnegie 315, 1:30 pm**

***Design Challenges in Light Compact Aircraft
Development***

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Aircraft Design, in particular military aircraft, calls for aircraft specific system level approach for meeting stringent operational requirements. Hence, development of new technologies and production methods are essential. Combat Aircraft falls under this category, which calls for extensive applications of computational fluid dynamics, lightweight, high strength materials, agile cockpit avionics, special control laws for stability, etc. The presentation addresses some of these issues in the design of a Light Combat Aircraft vehicle.

Dr Balasubramaniam holds a Bachelor Degree in Aeronautics and a Masters Degree in Aerospace from the University of Maryland, and a Ph.D. in Aerospace specializing in Structural Dynamics & Aeroelasticity from Indian Institute of Science, Bangalore, India. He was a Research Associate at NASA Langley Research Center (Hampton, VA) during 1977-79. His research career at National Aerospace Laboratories, Bangalore, India, spanned over thirty years from which he retired as Director level Scientist and Advisor. Dr Balasubramaniam served as a Diplomat in Germany during 1995-2000 responsible for the bilateral programmers in Science & Technology. Dr Balasubramaniam has over one hundred papers in International Journal and Conferences. He is the recipient of several awards and is a Fellow of Aeronautical Society of India. Dr Balasubramaniam was conferred with the Distinguished Alumni award by the Indian institute of Science during its Centenary Celebrations in 2009.

For more information, please contact Prof. Prasad at mprasad@stevens.edu or 201- 216 - 5571