2011-2012

Graduate Seminar

The Department of Mechanical Engineering – Engineering Mechanics

Proudly Presents

Kurt Schneider
Engineering Group Manager
Global N & V CAE and Structural Vibration
General Motors

Kurt Schneider is currently an Engineering Group Manager at General Motors. His responsibilities includes noise and vibration computer aided simulation, and structural vibrations across all of GM's products in their global market. Through his 22 year career at General Motors, he has been a part of multiple vehicle programs in the roles of hardware testing and development, computer aided engineering, and advanced methods development, primarily in the areas of noise and vibrations related phenomena.

Kurt holds a BSME from GMI Engineering & Management Institute (now called Kettering University), as well as an MSE from the University of Michigan. He is also a licensed professional engineer. He has published multiple papers on such topics as FRF based substructuring, path analysis, and simulation techniques. He has worked with software vendors in the development of methods and tools related to substructuring and component mode synthesis that are now found in commercial simulation tools used throughout industry.

Thursday, Apr. 12, 2012 **4:00 – 5:00 p.m.** **Room 112, ME-EM Bldg.**

Importance of Structural Vibrations to Mechanical Engineer

Structural dynamics is a fundamental part of all designs of mechanical system. At the heart of structural dynamics is structural vibrations. Most every product ever put into production has a structural component. This spans from such small items as computer fans and hard disk drives, to bridges and high rise buildings. All of these things must consider how the structure moves dynamically, and the effects of this motion on the function, durability, and safety of the product. In this presentation, an overview of the broad field of structural vibrations is presented. Motivation for all mechanical engineers to be firmly founded in this topic is given, and an overview of the rich areas of future research is presented.

Funding for the ME-EM Graduate Seminar Series is provided by Professional Plating, Inc. of Anoka, MN www.proplate.com
and the Department of Mechanical Engineering – Engineering Mechanics www.me.mtu.edu/seminar