

Automotive Noise and Vibration Control: Contemporary Engineering Practice and Research Issues

Overview

The course proposes an integrated study of vibration, acoustics, digital signal processing and machinery dynamics based on a case study approach; discussion of engineering practice including design, manufacturing, material, performance, and economic considerations; examination of research issues for world-wide automotive industry.

The major objectives of the course are to:

- ✓ Learn analytical, computational and experimental methods for analyzing automotive noise and vibration (NVH) problems
- ✓ Examine dynamic and acoustic issues involved in the design of contemporary vehicles
- ✓ Apply concepts to real-life vehicle and machinery noise and vibration control problems
- ✓ Identify research problems for graduate theses and for R&D organizations

Dates for the Course	16th May 2016 to 27th May 2016
Host Institute	IIT Madras
Number of Credits	2
Maximum Participants	30
You Should Attend If	<ul style="list-style-type: none">➤ You are an engineer in the automotive sector and are working on noise and vibration issues➤ You are a mechanical engineer who wants to understand the noise and vibration issues related to your product and then develop solutions➤ You are a student or faculty from an academic institution interested in learning how to identify research problems in this area
Course Fees	<p>The registration fees for the course are as follows:</p> <p>Student Participants: Rs. 2000 Faculty Participants: Rs. 5000 Government Research Organization Participants: Rs. 8000 Industry Participants: Rs. 15000</p> <p>The above fee is towards participation in the course, the course material, computer use for tutorials and assignments, and laboratory equipment usage charges.</p> <p>Mode of Payment: Demand Draft in favour of "Registrar, IIT Madras" payable at Chennai</p>
Accommodation	<p>The participants may be provided with hostel accommodation, depending on availability, on payment basis. Request for hostel accommodation may be submitted through the link: http://hosteldine.iitm.ac.in/iitmhostel</p>

Course Faculty



Prof. Raj Singh directs the NSF Smart Vehicle Concepts Center at The Ohio State University (USA). He is globally recognized for his seminal research in automotive NVH and geared system dynamics over 36+ years. Prof. Singh teaches an innovative graduate course sequence in automotive NVH.



Prof. Chandramouli is a faculty member in the Department of Mechanical Engineering at IIT Madras. His research interests include noise and vibration, fluid-structure interaction and non-linear dynamics. He is an active consultant to several industries.

Course Coordinator

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