LMS International invites you to discover and experience the benefits of thorough noise and vibration root cause analysis in the development process, with the help of Transfer Path Analysis (TPA) techniques in the LMS TPA Master Class.

From reliable and proven, traditional TPA methods to the latest innovative and fast, yet accurate techniques, the LMS TPA Master Class combines theory and practice with real-life examples and exercises on vehicles and vehicle components.

The LMS 2-day Master Class is designed to help you acquire process and methodology expertise in the field of vibro-acoustic refinement and troubleshooting in the vehicle development process. In a step by step process, LMS experts will introduce you to and familiarize you with the solutions to today’s challenges and the latest developments in TPA techniques, focusing on in-depth application skills as well as process know-how. By sharing best practices and illustrating the engineering solutions by means of real examples, benefits and limitations of the various TPA techniques will be evaluated and compared.

Agenda

Process Overview
- A systematic approach to vibro-acoustic refinement
- Overview of TPA-methods:
  - Single-reference TPA, Airborne Source Quantification, Fast TPA, OPAX and Response-Only Path Analysis
  - Role, applicability and limits of the various techniques in the vehicle engineering process
- Structural and acoustical load identification techniques
- Test based TPA in support of simulation driven development
  - Support of hybrid TPA-process
  - Role and value in the multi-attribute simulation process
  - Support of advanced sound engineering or branding process

Methodology & Best Practices
- Best practices for TPA-planning: detailed process analysis, planning insights & optimization
- Road noise TPA: multi-reference TPA
- Introduction to Transient TPA and Multi-level TPA

Real-life Examples & Exercises
- Instrumentation challenges and solutions
  - Specifics for various structural and acoustical load identification techniques
  - Correct use of structural and acoustical indicators, measurement setup validation, getting accurate mount stiffness values
- Operational & FRF-measurements
  - Measurement techniques, repeatability checking, data validation techniques, challenges and solutions for various TPA-techniques
- TPA-modeling, load identification, contribution analysis
  - Challenges, limits and solutions
  - Comparison of various methods: TPA, OPAX and Response-Only Path Analysis
  - Multi-reference TPA: Tips & Tricks

The participation fee for this 2-day Master Class is 200€. It includes refreshments, lunch and training material.

Join the LMS User Conferences
- Tuesday May 4: LMS User Conference Ankara, location Tubitak Uzay, METU University Campus
- Friday May 7: LMS User Conference Bursa, location Holiday Inn

During the LMS User Conference the latest developments of both TEST and Simulation products will be presented. Live demonstrations will be given by technical experts. Next to this, LMS users will present their applications and usage of LMS tools and technology for real life cases. This User Conference is an excellent opportunity to hear firsthand about a basketful of new LMS ideas and solutions, discuss future developments and share your experience with the LMS support and development teams and fellow LMS users.

For more info and registration please contact
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