VEHICLE ACOUSTICS

INTRODUCTION

Two-day Course
6 Participants

DATES AND TIMES

Flexible

PREREQUISITIES

Engineers or PhD Assistances who work in Automotive or NVH Field

LEARNING OBJECTIVES

- ✓ Articulate the basic NVH principles
- ✓ Understand the sound excitation mechanism of whole vehicle concept
- ✓ Identify the key sub-components of powertrain noise through cabin interior
- ✓ Determine the root-cause problems
- ✓ Overlook for sound optimization measures

TRAINING CONTENT

- ➢ **Fundamentals of Acoustics**
  - Definition of NVH Terms
  - Characteristics of Sound Waves
  - Perception of Humans
- ➢ **Measurement & Analysis Techniques**
  - Measurement Methods and Environment
  - Measurement Equipment
  - FFT, Overall and 1/3 Octave Level, Campbell Diagrams
- ➢ **Legislations**
  - Cabin Interior
  - Exterior (Pass-by and Tire Noise)
- ➢ **Powertrain NVH**
  - Engine
  - Transmission
  - Joints
  - Driveline
- ➢ **Chassis NVH**
  - Tire/Road Noise
  - Brake
  - Steering
- ➢ **Body NVH**
  - Primary Sound Optimization Measures
  - Secondary Sound Optimization Measure