NVH Math Prep

This self-paced DVD seminar is supplemented with 2 live web conferences to prepare students for graduate courses in the Automotive NVH certificate program.

The 15-hour seminar covers mathematical terms used for vibration and acoustic analysis (complex notation, vectors; rms, dB, frequency scales), Matlab tutorial and computer simulation exercises, along with experimental demonstrations and suggestions for self-study based on individual needs.

Topics presented in the NVH Math Prep seminar include:

- Complex algebra
- Linear algebra
- Matrix operations
- Fourier series and transforms
- Differential equations
- Laplace transform solution method

Prerequisites: BS in Mechanical or Electrical Engineering; this prerequisite requirement can be waived or substituted with written permission of Professor Raj Singh, for students who can demonstrate sufficient background in mathematics and Matlab.

Ohio State University’s Automotive NVH certificate includes international collaboration with Asian partner, the Korean Advanced Institute of Science and Technology (KAIST).