

Jaguar Basic Operation Training Course Outline

Section 1: Introduction

- Unix Basics
- GUI Basics
- Lab

Section 2: Vibration Basics

- Definition of terms
- Sampling theory
- Aliasing
- Filtering
- Signal types

Random Vibration Control

- Random theory/usage
- Time/Frequency Domain and Fourier Transform
- Leakage and Windowing
- Amplitude Characterization
- Gaussian Distribution
- Spectrum Definitions
- Degrees of Freedom
- Control tradeoffs
- Control Strategies
- Control Parameters, discussion and building profiles to be run on the shakers provided. (What happens when I change lines of resolution or DOF)
- Lab
- Review/Discussion period

Section 3: Sine Vibration Control

- Sine theory/ usage
- Amplitude relationships
- Signal Processing
- Tracking Filters
- Control Strategies
- Compression
- Level sequence
- Control Parameters, discussion and building profiles to be run on the shakers provided. (What's a tracking filter and why is **it** important to me)
- Lab
- Review/Discussion period

Section 4: Classical Shock and Shock Synthesis Control

- Pulse Definitions/Characteristics
- Compensation
- SRS
- Wavelets
- Control Parameters, discussion and building profiles to be run on the shakers provided. (Will this spec run on my shaker)
- Lab
- Review/Discussion period

Section 5: Mixed Mode, etc.