**Vibration and Control Revision**

Lectures watched:

01/10/2015 – mass/spring system

02/10/2015 – damper/ spring system and mass/spring/damper system

08/10/2015 – critically damped, overdamped and underdamped mass/spring/damper systems, log decrement method for finding zeta when underdamped.

09/10/2015 – root locus diagram and equivalent systems.

15/10/2015 – Laplace procedure.

16/10/2015 – response to inputs

30/10/2015 – Response of higher order systems to complicated inputs. Final Value theorem.

05/11/2015 – Closed Loops and block diagram reduction

06/11/2015 – Root Locus diagram and instability

12/11/2015 – Routh-Hurwitz Stability Criterion

28/01/2016 – sinusoidal response of a mass/spring and mass/spring/damper

29/01/2016 – work from 33 mins ish

**Control Tutorials for MATLAB and Simulink**

Introduction: System Modelling

**Mechanical Vibrations Book**

Chapters completed:

Chapter 1: fundamentals of vibration.

**Essentials of Control Book**

Chapters completed:

Closed loop systems and their models.

**Maths to revise:**

Partial fractions

Taylor Series

Newtonian Mechanics

Langrangian Mechanics

Vectors

~~Jacobian Matrices~~