

# **LABORATORY DEMONSTRATING ASSIGNMENTS**

## **2023 - 2024 Academic Session**

<b>Fall Term 2023 (Sept.-Dec.)</b>	<b>Winter Term 2024 (Jan.-April)</b>
<b>ME 4P03 – Fourth Year Laboratory</b>  Dr. Ching  Demonstrating 13 weeks @ 6 hrs. / week Preparation / Grading 52 hrs.  Beam in Bending and Torsion (D10) Digital Control System, Part I (D13) Robot Programming (D15) Heat Exchanger (H2) Oscillation of a Mass Spring System (D7) Invigilation/Grading I Invigilation/Grading II Grading III	<b>ME 4P03 – Fourth Year Laboratory</b>  Dr. Ching  Demonstrating 13 weeks @ 6 hrs. / week Preparation / Grading 52 hrs.  Dynamic Vibration Absorber (D8) / Water Hammer (F11) Plastic Bending (PB) / Modal Analysis (MA) Design of Experiment (DOE) / Surface Generation in a Machining Process (SG) Bone Implant and Biomechanics (BI) Digital Control System, Part II (D14) Thermal System Simulation (TSS) Lift Coefficient of an Airfoil (F16) Invigilation/Grading I Invigilation/Grading II Grading III
<b>ME 3M03 – Third Year Laboratory</b>  Dr. Ching  Demonstrating 13 weeks @ 6 hrs. / week Preparation / Grading 52 hrs.  Drill Press (M1) Lathe (M2) Milling Machine (M3) Diesel Engine (T1) Statically Indeterminate Structure (D4) Uniaxial Tensile Test (P8) Invigilation/Grading I Invigilation/Grading II Grading III	<b>ME 4FM3 – Advanced Instrumentation and Sensing for Thermo-Fluids</b>  Dr. Morton  Demonstrating (13 weeks @ 1hr/wk) preparation/grading 52hrs. (65 hours)  Thermo-Fluids and Data Acquisition/Signal Processing Expertise
	<b>ME 3M03 – Third Year Laboratory</b>  Dr. Ching  Demonstrating 13 weeks @ 6 hrs. / week Preparation / Grading 52 hrs.  Drag on Spheres (F18) Plastic Properties (P5) Parallel Series Pump Test (F12) Resistance Spot Welding (RSW) Reynolds Belt (F20) Invigilation/Grading I Invigilation/Grading II Grading III

## **ME 2B03 – Mechanical Measurements**

Dr. Motamed / Sessional

Demonstrating 13 weeks @ 6 hrs. / week  
Preparation / Grading 52 hrs.

General ME Expertise  
General ME Expertise

Record Keeping @ 65 hrs.

General ME Expertise