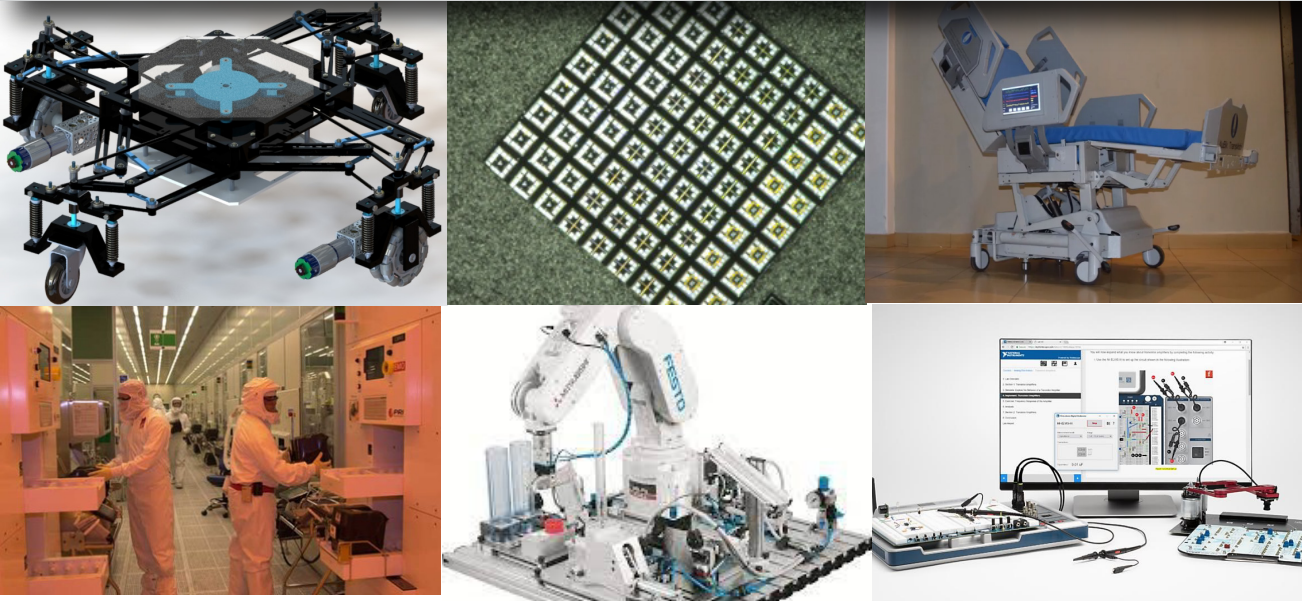




# Workshop on Mechatronics and Micro-mechatronics



Centre for Advanced Mechatronic Systems  
University of Moratuwa



## Resource Persons

### Prof. Ranjith Amarasinghe

Director - Centre for Advanced Mechatronic Systems, University of Moratuwa;  
Professor - Department of Mechanical Engineering, University of Moratuwa;  
Coordinator - Mechatronic Systems Engineering Stream, University of Moratuwa

### Mr. Uditha Roshan

Lecturer - Department of Mechanical Engineering, University of Moratuwa

### Mr. H.A.G.C. Premachandra

Temporary lecturer, Department of Mechanical Engineering, University of Moratuwa

### Ms. H.M.A.N. Herath

Temporary lecturer, Department of Mechanical Engineering, University of Moratuwa

### Mr. Samith Hettiarachchi

Research Assistant - Centre for Advanced Mechatronic Systems - AHEAD Project, University of Moratuwa

### Mr. K.N.M. Perera

Research Assistant, Centre for Advanced Mechatronic Systems, AHEAD Project, University of Moratuwa

## Abstract

Mechatronics is a well established domain in the industry as well as the academia which synergistically combine mechanical, electronic and control engineering and information technology to obtain the best solution to a given technological problem. The mechatronics relates to the design of systems, devices and products aimed at achieving an optimal balance between basic mechanical structure and its overall control. Application of mechatronics principles are ranging from domestic appliances systems, manufacturing equipment to highly decisive applications such as automobile and aviation systems. Micro mechatronics branches out as an emerging area in the mechatronics systems to dive into more focused applications such as microfluidics, microsensors and actuators. Furthermore, micro mechatronics utilizes design and fabrication technologies related to Micro/Nano Electro Mechanical Systems (MEMS/NEMS).

## Aims & Objectives

This workshop intends to broaden the knowledge of attendees in the field of mechatronics and micro-mechatronics and to diminish the knowledge gap in both academia and the industry.

## Target Audience

School teachers in the Technological Stream, Engineers working in the related fields and those who seek additional knowledge in the fields of mechatronics and micro-mechatronics

## Workshop Programme

- Introduction to Mechatronics and Micromechatronics (Lecture 45 mins)
- Introduction to Graphical Programming (Lecture and Interactive session 1 hr 15 mins)
- Sensors and Actuators from basics to advanced (Lecture and Interactive session 1 hr)
- Advanced Mechatronic Systems (Demonstrations 30 mins)
- Micromechatronic Systems (Demonstration 30 mins)

Participation is  
**FREE**  
of charge!

