

# Learning Module Map for MEMS Applications Overview

Learning Module: MEMS Applications Overview

The purpose of this learning module is to introduce students to some of the many applications of MEMS and allow them to explore areas of their personal interest.

Learning Module units:

- MEMS Applications Overview Primary Knowledge (PK)
- MEMS Applications Research Activity
- MEMS Applications Assessment

**Following is a suggested map on the implementation of this learning module.**

IMPORTANT STEPS	KEY POINTS	REASONS
<u>Learning Module Introduction</u> – Inquiry	Ask questions that get the students thinking about “how things work”. Examples: How do the screens on your phones know when to rotate? What allows the Wii hand-held devices to sense your movements? How does your car know when your tire pressure is low?	This activity gets the students thinking about how their gadgets work – many of which work because of MEMS.
Unit Presentation: Present the PowerPoint present - <u>MEMS Applications Overview</u>	Participants should read the PK either before or after the PowerPoint presentation.  A PowerPoint presentation can be downloaded from <a href="http://scem-nm.org">scem-nm.org</a> and presented to all participants.	This PK discusses the various applications of MEMS in a variety of fields. This information helps to prepare the participants for the research activity.
<u>Research Activity:</u> Complete the “MEMS Applications Research Activity”.	Encourage the participants to research applications in their field(s) of interest.	This activity allows the participants to further explore the various applications of MEMS and to research a specific application.
<u>Assessment:</u> Complete Assessment for this learning module.	Give the participants the assessment for this learning module.	Participants are evaluated on what they have learned about MEMS applications.

*Adapted from Graupp, P. & Wrona, R. (2006) The TWI Workbook: Essential Skills for Supervisors. New York, NY. Productivity Press.*