



Name of the Activity: Building a Simple Seismograph

	Outcomes	Teaching and Learning activities	Assessment
	<i>Having taken this activity, the participants will be able to:</i>	<i>The participants will be taught to achieve this specific outcome through the following learning activities:</i>	<i>The participants will be assessed on their achievement of this specific outcome through the following assessment tasks:</i>
Blended Learning Format - Face-to-face	Understand how a seismograph works to detect and record ground motion.	Presentation and videos about the seismograph, discussions	Group discussions evaluating students' understanding of the concepts
	Apply the engineering design process to design and build a simple seismograph model.	Explain the basic principles: suspended mass, recording device (pen/marker), ground anchor.	Practical assessment where students identify and describe the components of a seismograph
	Learn about the importance of stability and sensitivity in instrument design.	Demonstrate how ground motion moves the suspended mass, creating a record.	Observe student participation, teamwork, problem-solving
	Develop critical thinking and problem-solving skills.	Encourage ideas for materials and design solutions and provide a list of possible materials (straws, string, marbles, paper clips, foam, cardboard, rubber bands). Build the seismograph model and test, identify problems, and make improvements.	Evaluate design and functionality based on criteria.