

**Maulana Abul Kalam Azad University of Technology, West Bengal***(Formerly West Bengal University of Technology)***Syllabus for B. Tech in Civil Engineering**

(Applicable from the academic session 2018-2019)

<b>CE(ES)493</b>	<b>Engineering Geology Laboratory</b>	<b>2P</b>	<b>1 Credits</b>
<b>Course Outcome</b>	Upon completion of the course, the students will be able to: 1. Define and state the role of engineering geology in civil engineering		

	<ul style="list-style-type: none"><li>2. Understand origin of rocks and geologic structures</li><li>3. Apply different tools to identify rocks and minerals in hand specimen and under microscope</li><li>4. Analyze the geological structures through drawing the cross sections from the geological maps</li><li>5. Evaluate the results obtained from different geological experiments</li><li>6. Investigate the natural hazards/disasters that are caused by the geological reasons</li></ul>
<b>Prerequisite</b>	Knowledge of basic physics and chemistry
<b>Experiment 1</b>	Identification of minerals in hand specimen
<b>Experiment 2</b>	Identification of igneous rocks in hand specimen
<b>Experiment 3</b>	Identification of sedimentary rocks in hand specimen
<b>Experiment 4</b>	Identification of metamorphic rocks in hand specimen
<b>Experiment 5</b>	Study of crystals with the help of crystal models
<b>Experiment 6</b>	Study of geologic structures with the help of models
<b>Experiment 7</b>	Interpretation of geological maps: horizontal, vertical, uniclinal, folded and faulted structures
<b>Experiment 8</b>	Microscopic study of rocks and minerals