

**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: <b>1.</b> Define and state the role of engineering geology in civil engineering		

	<b>2.</b> Understand origin of rocks and geologic structures <b>3.</b> Apply different tools to identify rocks and minerals in hand specimen and under microscope <b>4.</b> Analyze the geological structures through drawing the cross sections from the geological maps <b>5.</b> Evaluate the results obtained from different geological experiments <b>6.</b> Investigate the natural hazards/disasters that are caused by the geological reasons
<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