

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)

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| CE(PC)493 | Surveying & Geomatics Laboratory | 2P | 1 Credits |
| Course Outcome | Upon completion of the course, the students will be able to: <ol style="list-style-type: none"> 1. State the interdependency and advancement of different surveying methods 2. Comprehend the working principles of different surveying and geomatics instruments and experiments 3. Execute the different methods of surveying and geomatics to measure the features of interest 4. Examine the results obtained from the surveying and geomatics experiments 5. Critically appraise the different techniques of surveying and geomatics in measuring and assessing the features of interest 6. Design and construct solutions for real world problems related to surveying and geomatics. | | |
| Prerequisite | Surveying & Geomatics [CE(PC)403] | | |
| Experiment 1 | Traverse survey by Prismatic Compass: Procedure; Computation and checks on closed traverse; Preparation of field book; Plotting the traverse; Sources of errors. | | |
| Experiment 2 | Theodolite Survey: Closed traverse by transit theodolite, Preparation of field book | | |
| Experiment 3 | Differential Levelling using Dumpy level: Collimation and Rise and Fall methods, Field book preparation | | |
| Experiment 4 | Total Station Survey: Traversing and Levelling | | |
| Experiment 5 | Visual Image Interpretation | | |
| Experiment 6 | Satellite Image Pre-processing | | |
| Experiment 7 | Digital Image Classification and Accuracy Assessment | | |
| Experiment 8 | Stereoscopic fusion of aerial photographs using mirror stereoscope | | |