Marwadi University

Syllabus for Master of Technology

Civil Engineering (Geotechnical)

Seminar-1(Software presentation)

01GT0302 (LC-CE)

Objective of the Course: Objectives of introducing this subject at final year level in Masters of civil engineering are:

- To make students aware of the various software available and its utilities
- To make students apply these software for anlysis and design of Geotechnical engineering problems

Credit Earned:2

Students learning outcomes:

After successful completion of the course it is expected that student will be able to..

1. Apply appropriate models to physical problems for proper simulation in software
2. Analyse the stresses problems of slope-stability in FEM based software
3. Analyse and compute the soil settlement for given structure and soil conditions in the software
4. Analyse the seepage through hydraulic structures in the software

Teaching and Examination Scheme

Teaching Scheme (Hours)			Credits	Theory Marks			Tutorial/ Practical Marks		Total Marks
Theory	Tutorial	Practical		ESE (E)	CSE (M)	Internal (I)	Viva (V)	Term Work (TW)	
0	0	4	2	0	0	0	50	50	100

Student is expected to learn the atleast one software wherein he would be able to operate smoothly and expected outcomes are satisfied after which he has to prepare a hard-copy report of approx..50 A-4 size pages covering

1. introduction to software selected,
2. its fundamneal,
3. its working procedure,
4. its modeling of problem
5. Result analysis and discussion
6. Conclusion

7. Limitations of the software

Student also needs to Demonstration through ppt

Recommended Study Material:

Web Resources

https://www.bentley.com/en/products/product-line/geotechnical-engineering-software/plaxis-3d

https://www.finesoftware.eu/geotechnical-software/

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