

NOC:Earth Sciences for Civil Engineering - Video course

COURSE OUTLINE

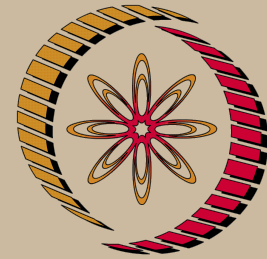
The course introduces the student to basic principles of geosciences and their applications in civil engineering. The modules of this course will help the student to have better understanding towards interior of the earth, earth system and its process.

COURSE DETAIL

Week	Topics
1.	Introduction of Earth Sciences, Plate Movement and Plate Boundaries
2.	Mineral and different type of rocks Rock types and their properties
3.	Seismology and the internal structure of the earth, Geological structures
4.	Geological Hazards, Civil Engineering applications – geological considerations in dams, tunnels

References:

- Understanding Earth, by Grotzinger, Jordan, Press and Siever, Freeman and Company.
- Dynamic of Earth by Skinner and Porter
- Structural Geology by M. P. Billings.
- Essentials of Geology by R. Wicander & J. S. Monroe
- Environmental Geology by Keller



NP-TEL

NPTEL

<http://nptel.ac.in>

Civil Engineering

Coordinators:

Prof. Javed N. Malik
Department of Civil Engineering IIT Kanpur