

Savitribai Phule Pune University

Ad-hoc Board of Studies in Sustainable Development

Certificate Course in Sustainable Development (Basic)

Eligibility : B.Sc.(Science, Geography,Geology), B.E.(Mech.Electronics) or
Equivalent.

Objective : (1) To learn various techniques useful in sustainable development.
(2) To train students with hands on skills essential for understanding and
dealing with environmental issues.
(3) To equip students for working in urban and rural area with effecting
the sustainable development.

Duration : Six Months for Certificate Course

Student Intake : 20 Nos.

Course fees : Rs.25,000/-

Admission process : Based on interviews.

Course Structure : The course is equivalent to 25 Cr.

Syllabus

Geographical Information System

- a) Introduction to GIS
- b) Analysis in GIS
- c) Digital Image Processing
- d) Spatial Analysis
- e) Software Training

30L + 30P

Oil Exploration Techniques

- a) Occurrence and Source rocks
- b) Reservoir, Traps, Origin & Migration
- c) Prospecting, Drilling and Logging
- d) Introduction to Oil Well Drilling:
- e) Indian Oil fields 30L + 30P
- f) Alternative Energy Sources

Measuring Instruments

- a) Weather, Hydrological parameters, Metrological stations
- b) Details, principals, repairing, installation and applications 20L + 30P

Surveying Techniques

- a) Cartography
- b) Mapmaking
- c) Seismic Method
- d) Gravity Method
- e) Electrical Surveying
- f) Magnetic surveying
- g) Use of Remote Sensing methods in engineering Geology
- h) Types of synthetic materials used as remedial measures
- i) Estimation of overburden thickness & rock strata classification 30L + 30P

10- Project

10 Credit Equivalent

L-Lectures

P-Practical hours.

Methodology : The course will be conducted with classroom lectures, each of one clock hour and also field training.

Assessment : Final assessment will be based on 100 Marks Written test and 100 Marks Project viva.

Certificate : All the students passing the examination will be given diploma certificate with grade. Failed students will be given attendance certificate.