

COURSE NAME : ELECTRICAL ENGINEERING GROUP

COURSE CODE : EE/EP

SEMESTER/YEAR : FIFTH

SUBJECT TITLE : PROFESSIONAL PRACTICES - V

SUBJECT CODE :

Teaching and Examination Scheme:

Teaching Scheme			Examination Scheme					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
-	-	03	-	-	-	-	50@	50

- External

@ - Internal

* On Line Examination

NOTE:

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- **Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)**

Notes: The teachers are encouraged to develop a “Speakers Bank”, a list of various experts from Industry and Educational Institutes who can speak on different topics. Similarly they should also prepare a directory of various nearby industries from their branch of Engineering, where the students can visit. Preferably, the students should visit the industries in a batch of not more than 20. Where possible, the polytechnics should encourage the students to visit nearby industries during winter or summer vacations, for a period of 1 to 2 weeks and prepare a detail report and this can be included in the report of “Industrial Visit” in Professional Practice, scheduled for the next semester.

Rationale :

In the changing world scenario, the Diploma Engineers are expected to acquire various skills which include ability to communicate effectively, to present a topic, to share ideas, to prepare reports etc. and shape up their own personality. They are also expected to acquire technical information on various topics related to their branch of study, in addition to the various subjects included in their curriculum.

These acquired skills and enhanced confidence level are going to help them get a good job, based on personal interviews and aptitude tests.

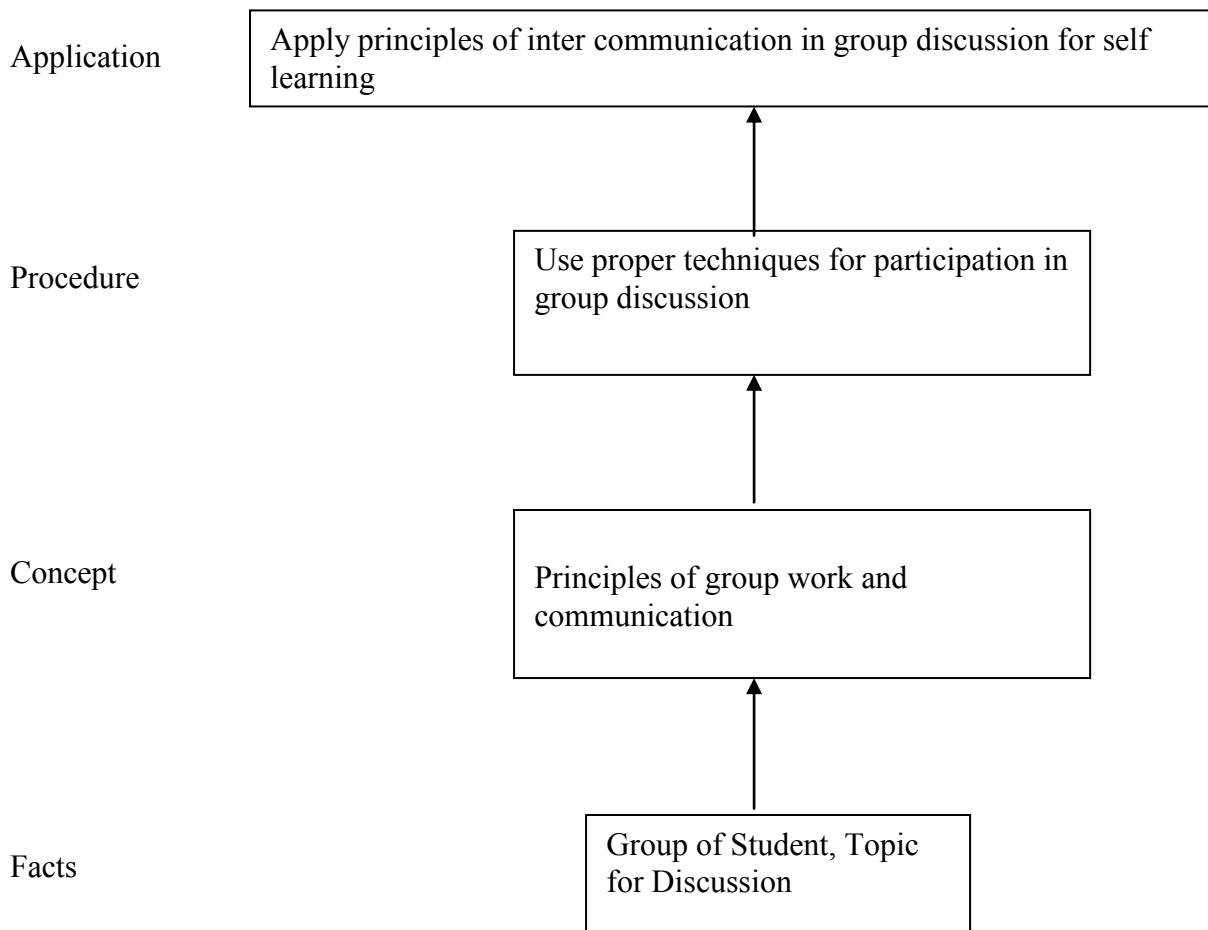
Visits to various nearby industries, lectures on technical subjects by experts, seminars on variety of subjects, group discussion, browsing internet and collection of information, preparing reports are some of the activities suggested under Professional Practice.

General Objectives:

Student will be able to:

1. Acquire information from different sources.
2. Prepare notes for given topic.
3. Present given topic in a seminar.
4. Interact with peers to share thoughts.
5. Prepare a report on industrial visit, expert lecture.

Learning Structure:



Activities	Hours
<p>1. Industrial Visits: Structured industrial visits be arranged and report of the same should be submitted by the individual student, to form a part of the term work. Following are the suggested type of Industries/ Fields – (Minimum three visits).</p> <ol style="list-style-type: none"> i. Visit to 220kv/110kv sub- station ii. Visit to Railway Station to study operation of Signaling system iii. Visit to L & T LT Switchgear Training Center at Pune. iv. Visit to Maintenance Department of sugar industry. v. Visit to Loco shed or EMW at Nashik. vi. Visit to a Foundry to see Furnaces and Ovens vii. Visit to industry to observe function of DAS and SCADA, viii. Visit to industry to observe Automation for manufacturing processes. 	18
<p>2. Lectures by Professional / Industrial Expert to be organized on any Two topics of the following suggested areas or any other suitable topics:</p> <ol style="list-style-type: none"> a) Eco friendly Air Conditioning/Refrigeration b) Functioning of Electricity Regulatory Commission c) Recent Modifications in IE Rules d) Modern trends in A. C. Machines. e) Testing of Switchgears f) Recent trends in Power Generation(micro-power/distributed generation) g) Interview Techniques. h) Computer Aided Drafting. i) Importance of non –conventional energy sources (All types). 	08
<p>3. Group Discussion : The students should discuss in group of four to six students and write a brief report on the any one from below given topics as part of term work. Any other topic for group discussions may be selected by the faculty members. Some of</p>	06

<p>the suggested topics are -</p> <ul style="list-style-type: none"> i) Energy saving in the institute/residential/industry/commercial. ii) Role of Electrical Engineer in disaster management. iii) Safety precautions in electrical engineering. iv) Scope of out sourcing of Electrical Engineering services. v) Disposal of electrical/electronic waste (e-waste). vi) Global warming. 	
<p>4. Information Search :</p> <p>The students should collect information individually and write a report on the any one from below given topics as part of term work. Any other topic for information search may be selected by the faculty members. Some of the suggested topics are -</p> <ul style="list-style-type: none"> a) Formalities/documentation required to obtain residential electrical connection (Form number A1 &D1). b) Study of residential electricity bill. c) Collect information related to the areas of employment & duties & responsibilities for diploma electrical engineers through employment advertisement in daily newspaper. d) State and National Statistics for Power Generation. e) Comparison of Cost per unit generated by various methods of Power Generation. f) Special features of metro railways. g) Recent trends in Power Generation(micro-power/distributed generation). 	08
<p>5.Seminar :</p> <p>Seminar topic should be related to the topics from above serial numbers 01-</p>	08

industrial visits, 02-guest lectures, 03- information search. Each student shall submit a report of at least 10 pages and deliver a seminar (Presentation time – 10 minutes).	
Total	48