

**Course Name : Electrical Engineering Group****Course Code : EE / EP****Semester : Third****Subject Title : Professional Practices-I****Subject Code : 17024****Teaching and Examination Scheme:**

Teaching Scheme			Examination Scheme					
TH	TU	PR	PAPER HRS	TH	PR	OR	TW	TOTAL
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**Notes 1:** 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, for the student’s visits. 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.

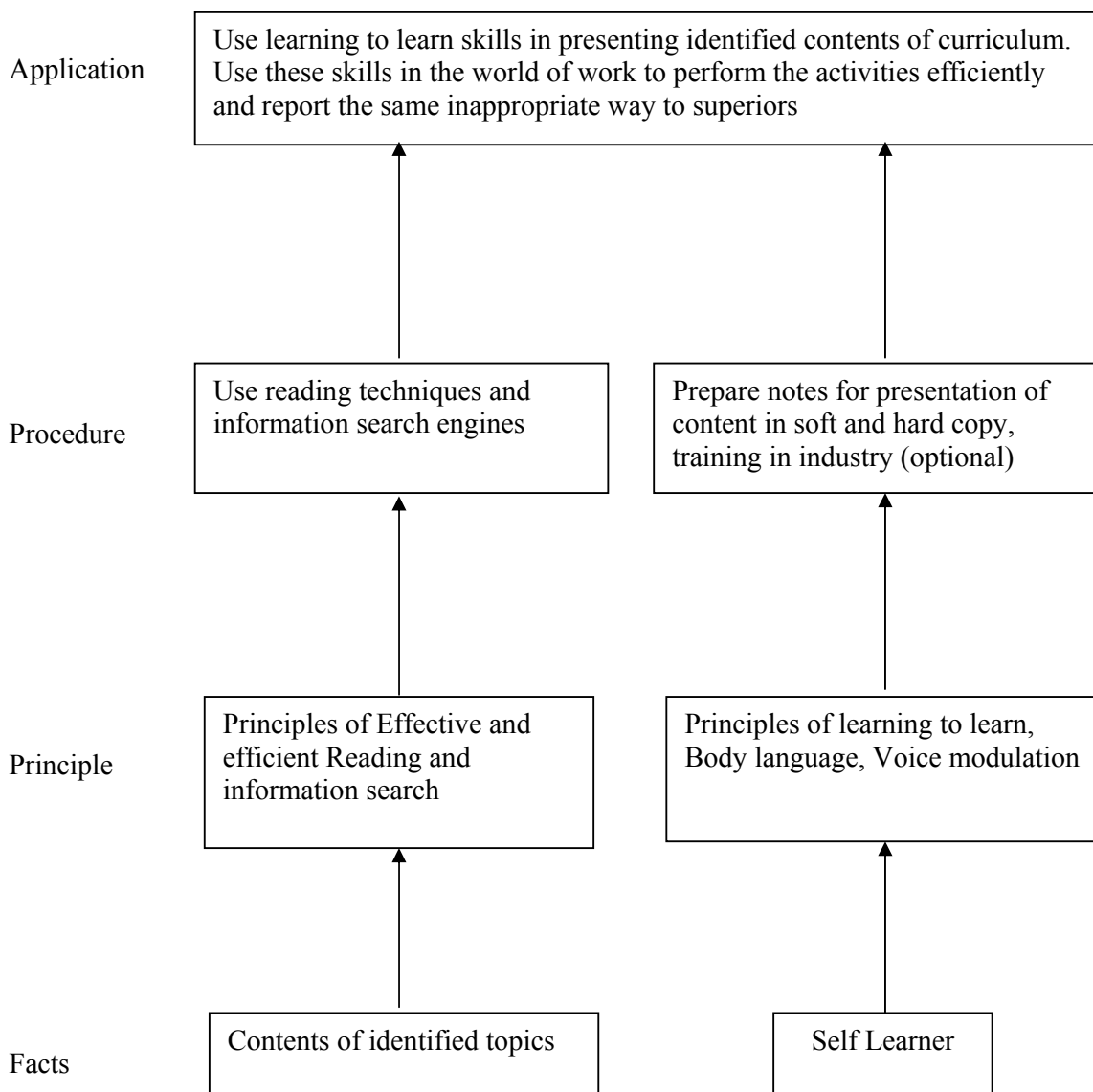
These acquired skills and enhanced confidence level are going to help them get a good job, based on personal interviews and aptitude tests.

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:**

Topic and Contents	Hours
<b>Topic 1:</b> <b>Specific Objectives:</b> <ul style="list-style-type: none"> <li>➤ Make student aware about industrial atmosphere</li> <li>➤ Understand the general working of an industry</li> </ul> <p>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.</p> <p>Following are the suggested type of Industries/ Fields – (Minimum three visits).</p> <p>Contents:</p> <p><b>1.1 Industrial Visits:</b></p> <ul style="list-style-type: none"> <li>i) Visit to 110/33/11kv sub- station (Compulsory)</li> <li>ii) Visit to transformer manufacturing industry.</li> <li>iii) Visit to electronics industry.</li> <li>iv) Visit to hydro-electric/ thermal power plant (Compulsory)</li> <li>v) Visit to non conventional power generation station-wind /solar power.</li> <li>vi) Visit to multi storied building for the study of electrical installations</li> </ul>	14
<b>Topics 2:</b> <b>Specific Objectives:</b> <ul style="list-style-type: none"> <li>➤ Students will get feel of new technology introduced in industry</li> <li>➤ Get introduced to recent development in technology</li> </ul> <p>Contents:</p> <p><b>Lectures by Professional / Industrial Expert to be organized on any Two topics of the following suggested areas or any other suitable topics:</b></p> <ul style="list-style-type: none"> <li>i) Role of Power Factor Improvement a tool in reducing cost of generation.</li> <li>ii) New trends to built pollution free environment.</li> <li>iii) Software for drafting.</li> <li>iv) Special purpose wiring in chemical/hazardous industries.</li> <li>v) Non conventional energy sources with special focus on use of biomass, solid waste.</li> <li>vii) Automotive wiring &amp; lightning.</li> <li>viii) Effect of transmission and distribution losses on cost of energy generation.</li> </ul>	10
<b>Topic 3:</b> <b>Information Search</b> <p>The students should collect information individually and write a report/prepare a note 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"> <li>a) Electrical wiring accessories</li> <li>b) Elevators installation and operation</li> <li>c) Street Light accessories and factures</li> <li>d) Alternative fuels and energy options.</li> <li>e) Collection of data for comparison of transformer companies.</li> </ul>	06
<b>Topic 4. Group Discussion :</b> <p>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 the suggested topics are -</p> <ul style="list-style-type: none"> <li>i) Electrically operated motor cars and scooters/motor bikes.</li> <li>ii) Load shading and remedial measures.</li> <li>iii) Safety in day to day life.</li> </ul>	08

iv) Conventional and non-conventional energy sources v) Electrical energy conservation. vi) Pollution control (All types).	
<b>Topic 5. Seminar:</b> The students should select a topic for <b>Seminar</b> based on recent developments & emerging technologies in Electrical &electronics engineering field. Each student shall submit a report of at least 06 pages and deliver a seminar (Presentation time – 10 minutes).	<b>10</b>
<b>Total</b>	<b>48</b>