

Course Name: Mechanical Engineering Group **Course Code:** ME/PT/PG/MH

Semester : Fourth

Subject Title: Professional Practices-IV **Subject Code:**

Teaching and Examination Scheme:

Teaching Scheme			Examination Scheme						
TH	TU	PR	Paper Hr	TH	TEST	PR	OR	TW	TOTAL
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Rationale:

Most of the diploma holders join industries. Due to globalization and competition in the industrial and service sectors the selection for the job is based on campus interviews or competitive tests.

While selecting candidates a normal practice adopted is to see general confidence, ability to communicate and their attitude, in addition to basic technological concepts.

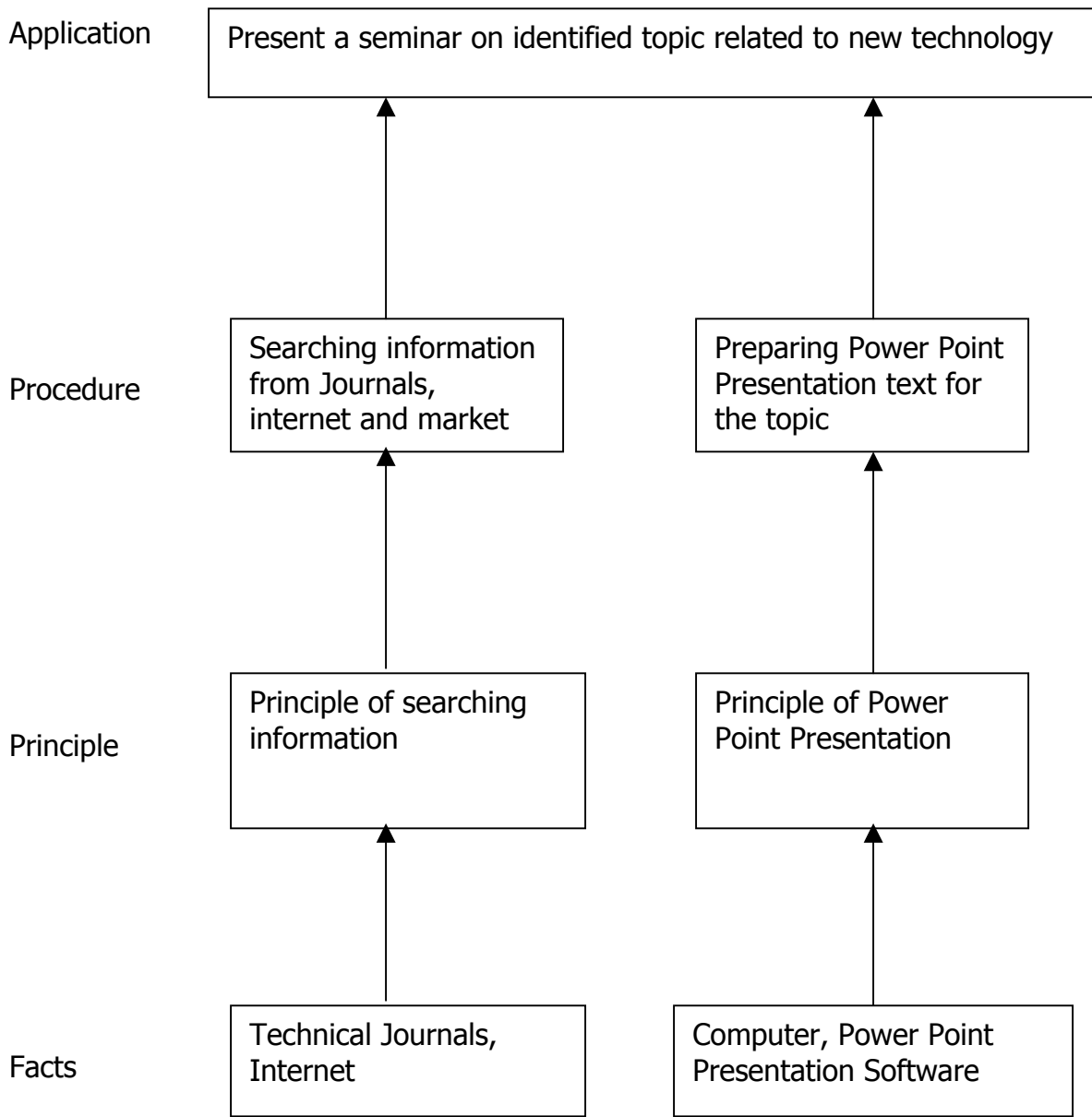
The purpose of introducing professional practices is to provide opportunity to students to undergo activities which will enable them to develop confidence. Industrial visits, expert lectures, seminars on technical topics and group discussion are planned in a semester so that there will be increased participation of students in learning process.

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:



Sr.No.	Activities	Practical Hours
1	<p>Industrial Visits Structured industrial visits be arranged and report of the same shall be submitted by the individual student, to form a part of the term work. The industrial visits may be arranged in the following areas / industries : Sugar Factory / Dairy / Chemical Industry / Thermal Power Plant .</p> <ul style="list-style-type: none"> i) Machine shop having CNC machines. ii) ST workshop / Auto service station iii) City water supply pumping station iv) Manufacturing unit to observe finishing and super finishing processes. 	14
2	<p>Lectures by Professional / Industrial Expert lectures to be organized from any two of the following areas: Interview Techniques. Modern Boilers – Provisions in IBR Applications of Sensors and Transducers Alternate fuels – CNG / LPG , Biodiesel, Ethanol, hydrogen Piping technology</p>	06
3	<p>Information Search : Information search can be done through manufacturer’s catalogue, websites, magazines, books etc. and submit a report any one topic. Following topics are suggested :</p> <ul style="list-style-type: none"> i) Engine lubricants & additives ii) Automotive gaskets and sealants iii) Engine coolants and additives iv) Two and Four wheeler carburetor. v) Power steering vi) Filters vii) Different drives/Transmission systems in two wheelers. viii) Types of bearings – applications and suppliers. ix) Heat Exchangers x) Maintenance procedure for solar equipment. <p>Tools holder on general purpose machines and drilling machines.</p>	08
4	<p>Seminar : Seminar topic shall be related to the subjects of fourth semester. Each student shall submit a report of at least 10 pages and deliver a seminar (Presentation time – 10 minutes)</p>	08

5	Mini Project / Activities : (any one) a) Prepare one model out of card board paper / acrylic / wood / thermocol / metal such as : i) Elliptical Trammel ii) Pantograph iii) Coupling iv) Cams and Followers v) Geneva mechanism b) Dismantling of assembly (e.g. jig / fixtures , tool post , valves etc.) Take measurement and prepare drawings / sketches of different parts. c) Make a small decorative water fountain unit. d) Toy making with simple operating mechanisms.	12
	Total	48