

COURSE TITLE : TWO & THREE WHEELER SERVICE LAB AND MINI PROJECT
COURSE CODE : 4059
COURSE CATEGORY : A
PERIODS/WEEK : 3
PERIODS/SEMESTER : 42
CREDITS : 5 (3+2)

TIME SCHEDULE

Module	Topic	Periods
1	Dismantle and assemble single cylinder 2 stroke and 4 stroke engines	10
2	Carryout accelerator, brake and clutch adjustment as per specification	11
3	Dismantle and assemble two wheeler gear box and finding gear ratio	10
4	Understand the Constructional details of three wheeler chassis frame and the working of power transmission	11
TOTAL		42

GENERAL COURSE OUTCOME

Module	G.O	Student will be able to
1	1	Understand dismantle and assembling/ producers of 2 stroke and 4 stroke engines (single cycle)
	2	Carryout various adjustments needed in Accelerator clutch and brake.
	3	Dismantle and assemble two wheeler gear boxes.
2	1	Understand constructional details of 3 wheeler chassis frame.
	2	Undertake mini-projects related to auto mobile technology useful to industry/society/community. (innovative and renovative works)

SPECIFIC COURSE OUTCOME

MODULE I

- 1.1.0 Dismantle and assemble single cylinder 2 stroke and 4 stroke engines
- 1.1.1 Identify the faults in ignition system of 2 and three wheelers
- 1.1.2 Perform tuning of 2 and 3 wheeler carburettor

MODULE II

2.1.0 Carryout accelerator, brake and clutch adjustment as per specification

MODULE III

3.1.0 Dismantle and assemble two wheeler gear box and finding gear ratio.

3.1.1 Dismantle and assemble of three wheeler gear box and finding gear ratios

3.1.3 Carryout three wheeler brake and clutch play adjustments

MODULE IV

4.1.0 Understand the Constructional details of three wheeler chassis frame and the working of power transmission.

4.1.1 Dismantle and assemble the three wheeler steering system

MODULE V

5.1.0 Undertake mini-projects related to automobile technology useful to industry/society/community (innovative and renovative works)

CONTENT DETAILS

MODULE I

1. Dismantling and assembling of single cylinder 2 stroke engine and identify the parts.
2. Dismantle and assemble single cylinder 4 stroke engine and identify the parts.
3. Trouble shooting of Capacitor Discharge Ignition system of 2 and three wheelers.
4. Servicing and tuning of 2 and 3 wheeler carburettor.

MODULE II

1. Accelerator, brake and clutch adjustment as per specification.
2. Two wheeler chain sprocket replacement and rear brake system cleaning.

MODULE III

1. Dismantling and assembling of two wheeler gear box and finding gear ratio.
2. Dismantling and assembling of three wheeler gear box and finding gear ratios.
3. Three wheeler brake and clutch play adjustment

MODULE IV

1. Removal and refitting of propeller shaft and suspension from three wheeler
2. Dismantle and assemble three wheeler steering system
3. Dismantling and assembling of two wheeler Transmission-continuously variable transmission (CVT).