



# GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for Bachelor of Vocation (B.Voc), 5<sup>th</sup> Semester

Branch: Automobile Servicing

Subject Name: Automobile Workshop - II

Subject Code: 1150105

With effective  
from academic  
year 2018-19

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			C	ESE (E)	PA (M)	ESE (V)	PA (I)	
-	-	2	2	-	-	30	20	50

## Course Content: Practical

Sr. No.	Content
1.	Find the mechanical efficiency of a multi-cylinder engine by Morse Test
2.	Tune a multi-cylinder petrol engine and set dwell, rpm, ignition timing, CB point gap, spark plug gap, and tappet clearance.
3.	Check the condition of the given battery as regards: (i) cell voltage (ii) specific gravity (iii) ampere-hour capacity (iv) Level of electrolyte. Use battery capacity tester. Clean the battery and charge it. Prepare a maintenance schedule.
4.	Dismantle study, assemble and check for proper working the following: (a) Electric horn (b) Wiper motor (c) Starter motor (d) dynamo (e) alternator.
5.	Test the following on electrical test bench: (a) Dynamo (b) Starter motor (c) Alternator. Also study the working of a growler.
6.	Dismantle, inspect and assemble the magneto of a 2-wheeler. Set the ignition timing using dial gauge.
7.	Dismantle and assemble the given electrical fuel pump. Check it for proper working.
8.	Set the cut-out and regulator of a vehicle.
9.	Dismantle, study, and re-assemble multi-cylinder F.I. pump
10.	Test a multi-cylinder F.I. pump on calibrating machine and check it for proper phasing. Set the injection timing on the engine.
11.	Test a diesel fuel injector and set injection pressure. Grind needle and seat.
12.	Study and sketch rotary F.I. pump.
13.	Study of working of electric vehicle.
14.	Study and sketch the Electrical Wiring System of a Car.