



**GUJARAT TECHNOLOGICAL UNIVERSITY**

**Syllabus for Bachelor of Vocation (B.Voc), 6<sup>th</sup> Semester**

**Branch: Automobile Servicing**

**Subject Name: Automobile Maintenance Service & Repairs - II**

**Subject Code: 1160101**

**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) |             |
| 3               | - | 0 | 3       | 50                | -      | -               | -      | 50          |

**Course Content:**

| Unit No.            | Content  | Hrs       |
|---------------------|--|-----------|
| 1                   | <b>Fault Diagnosis:</b> Diagnostic Trouble Codes, ECM Power and Ground Circuit Check, MAP Sensor Circuit, VSS Circuit Check, Fuel Pressure Check, Fuel Injection Circuit Check, Evaporative Emission Control System Check, Inspection of ECM & its Control.  | 08        |
| 2                   | <b>Overhaul and Reconditioning Procedures- 1:</b> Overhaul and reconditioning procedures of engine, clutch, gear box   | 08        |
| 3                   | <b>Overhaul and Reconditioning Procedures- 2:</b> Propeller shaft & universal joints, differential, axles, and hubs, Overhaul and reconditioning procedures of steering and suspension system components including McPherson strut. Overhaul and reconditioning procedures of drum and disc brakes | 08        |
| 4                   | <b>Overhaul and Reconditioning Procedures -3:</b> Service, overhaul and testing of starter motor, alternator, ignition system, wiper motor, electrical fuel pump, horn, flasher unit, wiring harness, condenser, H.T. coil, spark plug.  | 10        |
| 5                   | <b>Reconditioning:</b> Overhaul, and testing of diesel fuel injector, single and multi-cylinder fuel injection pumps. Calibration, phasing, and spray tests. Air-conditioning and heating equipment: Faults and their remedies.  | 08        |
| <b>Total Hours:</b> |  | <b>42</b> |

**Suggested Specification table with Marks (Theory):**

| Distribution of Theory Marks |         |         |         |         |
|------------------------------|---------|---------|---------|---------|
| R Level                      | U Level | A Level | N Level | E Level |
| 5                            | 15      | 15      | 10      | 5       |

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate and above Levels (Bloom's Taxonomy)