

**DR S. & S.S. GHANDHY COLLEGE OF ENGINEERING  
AND TECHNOLOGY**

**GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)**

***DIPLOMA AUTOMOBILE ENGINEERING***

**CURRICULUM BOOKLET**

**AUTOMOBILE ENGINEERING DEPARTMENT**

## SEMESTER 1

| <u><b>SUB<br/>CODE</b></u>     | <u><b>SUBJECT<br/>NAME</b></u>  | <u><b>CATEGORY</b></u>       | <u><b>L.</b></u> | <u><b>T.</b></u> | <u><b>P.</b></u> | <u><b>TOTAL</b></u> | <u><b>E</b></u> | <u><b>M</b></u> | <u><b>I</b></u> | <u><b>V</b></u> | <u><b>TOTAL</b></u> |
|--------------------------------|---------------------------------|------------------------------|------------------|------------------|------------------|---------------------|-----------------|-----------------|-----------------|-----------------|---------------------|
| <a href="#"><u>4300001</u></a> | Mathematics                     | Basic Sciences               | 3                | 1                | 0                | 4                   | 70              | 30              | 0               | 0               | 100                 |
| <a href="#"><u>4300002</u></a> | Communication Skills in English | Humanities & Social Sciences | 2                | 0                | 2                | 3                   | 70              | 30              | 25              | 25              | 150                 |
| <a href="#"><u>4300004</u></a> | Applied Physics                 | Basic Sciences               | 3                | 0                | 2                | 4                   | 70              | 30              | 25              | 25              | 150                 |
| <a href="#"><u>4300007</u></a> | Engineering Drawing             | Engineering Sciences         | 2                | 0                | 4                | 4                   | 70              | 30              | 25              | 25              | 150                 |
| <a href="#"><u>4300015</u></a> | Sports and Yoga                 | Audit                        | 0                | 0                | 2                | 0                   | 0               | 0               | 50              | 0               | 50                  |
| <a href="#"><u>4310001</u></a> | Basics of Civil Engineering     | Engineering Sciences         | 0                | 2                | 2                | 3                   | 0               | 0               | 25              | 25              | 50                  |
| <a href="#"><u>4310201</u></a> | Auto Trade Practice             | Program Core                 | 0                | 0                | 4                | 2                   | 0               | 0               | 25              | 25              | 50                  |

## SEMESTER 2

| <b><u>SUB<br/>CODE</u></b> | <b><u>SUBJECT<br/>NAME</u></b>                  | <b><u>CATEGORY</u></b> | <b><u>L.</u></b> | <b><u>T.</u></b> | <b><u>P.</u></b> | <b><u>TOTAL</u></b> | <b><u>E</u></b> | <b><u>M</u></b> | <b><u>I</u></b> | <b><u>V</u></b> | <b><u>TOTAL</u></b> |
|----------------------------|---|------------------------|------------------|------------------|------------------|---------------------|-----------------|-----------------|-----------------|-----------------|---------------------|
| 4300003                    | Environment and Sustainability                  | General Science        | 3                | 0                | 0                | 3                   | 70              | 30              | 0               | 0               | 100                 |
| 4300008                    | Engineering Mechanics                           | Engineering Sciences   | 3                | 1                | 2                | 5                   | 70              | 30              | 25              | 25              | 150                 |
| 4300014                    | Basics of Electrical and Electronic Engineering | Engineering Sciences   | 0                | 2                | 2                | 3                   | 0               | 0               | 25              | 25              | 50                  |
| 4300019                    | Computer Applications and Graphics              | Engineering Sciences   | 0                | 0                | 4                | 2                   | 0               | 0               | 25              | 25              | 50                  |
| 4300020                    | Engineering Material                            | Program Core           | 3                | 0                | 2                | 4                   | 70              | 30              | 25              | 25              | 150                 |
| 4301901                    | Engineering Workshop practice                   | Engineering Sciences   | 0                | 0                | 4                | 2                   | 0               | 0               | 25              | 25              | 50                  |
| 4320202                    | Thermodynamics & Hydraulics                     | Program Core           | 3                | 1                | 0                | 4                   | 70              | 30              | 0               | 0               | 100                 |

## SEMESTER 3

| <b><u>SUB<br/>CODE</u></b> | <b><i>SUBJECT<br/>NAME</i></b>              | <b><i>CATEGORY</i></b> | <b><i>L.</i></b> | <b><i>T.</i></b> | <b><i>P.</i></b> | <b><i>TOTAL</i></b> | <b><i>E</i></b> | <b><i>M</i></b> | <b><i>I</i></b> | <b><i>V</i></b> | <b><i>TOTAL</i></b> |
|----------------------------|---|------------------------|------------------|------------------|------------------|---------------------|-----------------|-----------------|-----------------|-----------------|---------------------|
| <b>4330201</b>             | Automobile Engine                           | Program Core           | 3                | 0                | 2                | 4                   | 70              | 30              | 25              | 25              | 150                 |
| <b>4330202</b>             | Automobile Transmission & Mechanism         | Program Core           | 3                | 0                | 2                | 4                   | 70              | 30              | 25              | 25              | 150                 |
| <b>4330203</b>             | Automobile Electrical and Electronic System | Program Core           | 3                | 0                | 2                | 4                   | 70              | 30              | 25              | 25              | 150                 |
| <b>4330204</b>             | Fuels and Pollution Control System          | Program Core           | 3                | 0                | 2                | 4                   | 70              | 30              | 25              | 25              | 150                 |
| <b>4330205</b>             | Vehicle Body Engineering                    | Program Core           | 2                | 0                | 2                | 3                   | 70              | 30              | 25              | 25              | 150                 |
| <b>4330206</b>             | Automobile Design & Drafting                | Program Core           | 2                | 2                | 2                | 5                   | 70              | 30              | 25              | 25              | 150                 |

## SEMESTER 4

| <b><u>SUBCODE</u></b> | <b><u>SUBJECTNAME</u></b>                 | <b><u>CATEGORY</u></b> | <b><u>L.</u></b> | <b><u>T.</u></b> | <b><u>P.</u></b> | <b><u>TOTAL</u></b> | <b><u>E</u></b> | <b><u>M</u></b> | <b><u>I</u></b> | <b><u>V</u></b> | <b><u>TOTAL</u></b> |
|-----------------------|---|------------------------|------------------|------------------|------------------|---------------------|-----------------|-----------------|-----------------|-----------------|---------------------|
| 4300003               | Environment and Sustainability            | compulsory             | 3                | 0                | 0                | 3                   | 70              | 30              | 0               | 0               | 100                 |
| 4340001               | Essence of Indian Knowledge and Tradition | Elective(Any one)      | 2                | 0                | 0                | 2                   | 70              | 30              | 25              | 25              | 150                 |
| 4340002               | Contributor Personality Development       | Elective(Any one)      | 2                | 0                | 0                | 2                   | 70              | 30              | 25              | 25              | 150                 |
| 4340003               | Integrated Personality Development Course | Elective(Any one)      | 2                | 0                | 0                | 2                   | 70              | 30              | 25              | 25              | 150                 |
| 4340201               | Automotive Heating & Air Conditioning     | compulsory             | 2                | 0                | 2                | 3                   | 70              | 30              | 25              | 25              | 150                 |
| 4340202               | Automotive Mechanics                      | compulsory             | 2                | 2                | 0                | 4                   | 70              | 30              | 0               | 0               | 100                 |
| 4340203               | Recent Trends in Automobile               | compulsory             | 2                | 0                | 2                | 3                   | 70              | 30              | 25              | 25              | 150                 |
| 4340204               | Manufacturing Technology                  | compulsory             | 3                | 0                | 2                | 4                   | 70              | 30              | 25              | 25              | 150                 |
| 4340205               | Automobile Professional Practice-1        | compulsory             | 0                | 0                | 6                | 3                   | 0               | 0               | 50              | 50              | 100                 |

## SEMESTER 5

| <u>SUBCODE</u> | <u>SUBJECTNAME</u>  | <u>CATEGORY</u> | <u>L.</u> | <u>T.</u> | <u>P.</u> | <u>TOTAL</u> | <u>E</u> | <u>M</u> | <u>I</u> | <u>V</u> | <u>TOTAL</u> |
|----------------|---------------------|-----------------|-----------|-----------|-----------|--------------|----------|----------|----------|----------|--------------|
| 4350201        | Industrial Training | compulsory      | 0         | 0         | 30        | 15           | 0        | 0        | 500      | 300      | 800          |

## SEMESTER 6

| <u>COURSE</u> | <u>COURSE TITLE</u>            | <u>CATEGORY</u> | <u>TEACHING SCHEME (HOURS)</u> |   |   | <u>EXAMINATION SCHEME</u> |                     |    |     |    |             |
|---------------|--------------------------------|-----------------|--------------------------------|---|---|---------------------------|---------------------|----|-----|----|-------------|
|               |                                |                 | L                              | T | P | CREDITS (L+T+P)           | <u>THEORY MARKS</u> |    |     |    | GRAND TOTAL |
|               |                                |                 |                                |   |   |                           | ESE                 | PA | ESE | PA |             |
| 4300021       | Entrepreneurship and Start-ups | compulsory      | 3                              | 0 | 0 | 3                         | 70                  | 30 | 0   | 0  | 100         |
| 4360201       | Maintenance & Service -I       | compulsory      | 2                              | 0 | 2 | 4                         | 70                  | 30 | 25  | 25 | 150         |
| 4360202       | Maintenance & Service -II      | compulsory      | 2                              | 0 | 2 | 4                         | 70                  | 30 | 25  | 25 | 150         |
| 4360203       | Maintenance & Service -III     | compulsory      | 2                              | 0 | 2 | 4                         | 70                  | 30 | 25  | 25 | 150         |
| 4360204       | Electric & Hybrid vehicle      | compulsory      | 2                              | 0 | 2 | 4                         | 70                  | 30 | 25  | 25 | 150         |
| 4360205       | Transport                      | compulsory      | 2                              | 0 | 0 | 2                         | 70                  | 30 | 0   | 0  | 100         |

|                |                                    |            |    |   |    |    |     |     |    |     |     |
|----------------|------------------------------------|------------|----|---|----|----|-----|-----|----|-----|-----|
|                | management & motor Industry        |            |    |   |    |    |     |     |    |     |     |
| <b>4360206</b> | Automobile professional practice-2 | compulsory | 0  | 0 | 6  | 6  | 0   | 0   | 50 | 50  | 100 |
| <b>TOTAL</b>   |                                    |            | 18 | 0 | 11 | 29 | 350 | 150 | 80 | 180 | 800 |