

KADI SARVA VISHWAVIDYALAYA, GANDHINAGAR

Bachelor of Automobile Semester 3 Syllabus

| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
|--------------|---|-----------------|---------|---------|-----------|--------------|-------------------|-------|----------|-----------|------------------------|-------------|
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| CC-301A | Differential Equations And Integral transform | 3 | 2 | 0 | 5 | 5 | 3 | 70 | 30 | 20 | 0 | 120 |
| AE302 | Kinematics of Machines | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| AE303 | Machining & Casting Processes | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE304 | Material science and metallurgy | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE305 | Advance Strength of Material | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE306 | Engineering Thermodynamics | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| Total | | 20 | 2 | 6 | 28 | 25 | 18 | 420 | 180 | 120 | 90 | 810 |

Bachelor of Automobile Semester 4 Syllabus

| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
|--------------|--|-----------------|---------|---------|-----------|--------------|-------------------|-------|----------|-----------|------------------------|-------------|
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| CC401A | Complex Analysis and Numerical Analysis | 3 | 2 | 0 | 5 | 5 | 3 | 70 | 30 | 20 | 0 | 120 |
| AE402 | Electrical Machines and Electronics | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE403 | Non Conventional Energy Sources | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| AE404 | Industrial drafting & machine design | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE405 | Mechanical Measurement & Metrology | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE406 | Fluid Mechanics | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| Total | | 19 | 2 | 8 | 29 | 25 | 18 | 420 | 180 | 120 | 120 | 840 |

Bachelor of Automobile Semester 5 Syllabus

| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
|--------------|---|-----------------|---------|---------|-----------|--------------|-------------------|-------|----------|-----------|------------------------|-------------|
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| AE501 | S.I engine | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE502 | Automobile engine component design | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE503 | Automobile fuels and lubricants | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE504 | Automobile system | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE505 | Heat & Mass Transfer (common with mechanical) | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE506 | Automobile chassis and body engineering | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| Total | | 20 | 0 | 10 | 30 | 25 | 18 | 420 | 180 | 120 | 150 | 870 |

| Bachelor of Automobile Semester 6 Syllabus | | | | | | | | | | | | |
|--|--|-----------------|---------|---------|-----------|--------------|-------------------|-------|----------|-----------|------------------------|-------------|
| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| CC601 | Principle of Management | 2 | 0 | 0 | 2 | 2 | 3 | 70 | 30 | 20 | 0 | 120 |
| AE601 | Dynamics of Machinery (common with mechanical) | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE602 | Electrical and electronics system for automobile | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE603 | Computer aided design (common with mechanical) | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE604 | C.I engine | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE605 | Transport management and laws | 4 | 0 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | 0 | 120 |
| AE606 | Project / Seminar | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 20 | 30 | 50 |
| Total | | 20 | 0 | 10 | 30 | 25 | 18 | 420 | 180 | 140 | 150 | 890 |

| Bachelor of Automobile Semester 7 Syllabus | | | | | | | | | | | | |
|--|--|-----------------|---------|---------|-----------|--------------|-------------------|-------|----------|-----------|------------------------|-------------|
| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| AE701 | Two and three wheeler technology | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE702 | Automobile pollution and control | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE703 | Refrigeration and air conditioning (common with mechanical) | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE704 | Vehicle maintenance | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE705 | Vehicle dynamics | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE706A | Elective-I: Automotive safety | 4 | 0 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | - | 120 |
| AE706B | Elective-I: Fuel cell technology | 4 | 0 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | - | 120 |
| AE706C | Elective-I: Quality & reliability Engineering (common with mechanical) | 4 | 0 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | - | 120 |
| AE706D | Elective-I: alternate fuels and energy system | 4 | 0 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | - | 120 |
| TOTAL | | 20 | 0 | 10 | 30 | 25 | 18 | 420 | 180 | 120 | 150 | 870 |

| Bachelor of Automobile Semester 7 Syllabus | | | | | | | | | | | | |
|--|---|-----------------|---------|---------|-----------|--------------|-------------------|-------|----------|-----------|------------------------|-------------|
| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| AE801 | Automobile chassis component design | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE802 | Vehicle Performance | 3 | 1 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | - | 120 |
| AE803 | Special purpose vehicles | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| AE804 | Project Practice | 0 | 0 | 16 | 16 | 8 | - | - | - | 50 | 100 | 150 |
| AE805A | Elective-II: Automobile aerodynamics | 4 | 0 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | - | 120 |
| AE805B | Elective-II: new generation and hybrid vehicles | 4 | 0 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | - | 120 |
| AE805C | Elective-II: Vibration noise and harness control | 4 | 0 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | - | 120 |
| AE805D | Elective-II :automotive hydraulics and pneumatics | 4 | 0 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | - | 120 |
| AE805E | Elective-II : Resource management | 4 | 0 | 0 | 4 | 4 | 3 | 70 | 30 | 20 | - | 120 |
| TOTAL | | 14 | 1 | 20 | 35 | 25 | 15 | 350 | 150 | 150 | 190 | 840 |