KADI SARVA VISHWAVIDYALAYA, GANDHINAGAR

| Master of Engineering - Automobile Engineering Semester 1 Syllabus | | | | | | | | | | | | |
|--|--|----------|-----------------|----------|-------|-----------------|--------|------------|-------|-------|-------------|-------|
| | | | Teaching Scheme | | | Tatal | | Takal | | | | |
| Subject Code | Subject Name | 1 /11/20 | T (11.5) | D (11=a) | TOTAL | Total Credit | Theory | N. da ulsa | IE | CIA | Practical / | Total |
| | | L (Hrs) | i (Hrs) | P (Hrs) | Hrs | Credit | Hrs | Marks | Marks | Marks | Viva Marks | Marks |
| MECC-101 | Research Methodology | 2 | 0 | 0 | 2 | 2 | 3 | 70 | 30 | 20 | 0 | 120 |
| MEA-101 | Fundamental of automotive system | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| MEA-102 | Vehicle dynamics | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| | Advanced Thermodynamics and Heat Transfer | | | | | | | | | | | |
| MEA-103 | (Common with ME-Thermal) | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| MEA-104 | Automobile Maintenance and Pollution Control | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| MEA-105 A | Elective-I Combustion Engineering | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| MEA-105 B | Elective-I Alternate Fuels and Energy | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| MEA-105 C | Elective-I Principles of Management | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| MEA-105 D | Elective-I Entrepreneurship Development | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| | Total | | | 8 | 29 | 25 | 18 | 420 | 180 | 120 | 120 | 840 |

| Master of Engineering - Automobile Engineering Semester 2 Syllabus | | | | | | | | | | | | |
|--|--|---------|-----------------|---------|-------|-----------------|-------------------|---------|-------|-------|-------------|----------------|
| | | | Teaching Scheme | | | | Evaluation Scheme | | | | | |
| Subject Code | Subject Name | I (Hrc) | T (Hrc) | P (Hrs) | TOTAL | Total Credit | Theory | Marks | IE | CIA | Practical / | Total Marks |
| | | L (HIS) | 1 (1113) | Р (ПІЗ) | Hrs | Credit | Hrs | IVIAIKS | Marks | Marks | Viva Marks | IVIAIKS |
| MEA-201 | Automotive Air Conditioning | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| MEA-202 | Automotive design | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| MEA-203 | Automobile chassis and body Engineering | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| MEA-204 | Transport management and laws | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| MEA-205 | Instrumentation and vehicle testing | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| MEA-206 A | Elective II Automotive materials and manufacturing | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| MEA-206 B | Elective II Finite element modeling and analysis | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| MEA-206 C | Elective II Autotronics | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| MEA-207 | <u>Seminar</u> | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 60 | 100 | 160 |
| | Total | | | 10 | 30 | 25 | 18 | 420 | 180 | 180 | 160 | 1000 |

| Master of Engineering - Automobile Engineering Semester 3 Syllabus | | | | | | | | | | | | |
|--|--|-----------------|----------|---------|-------|--------|-------------------|-------|-------|------------|-------------|----------------|
| | Subject Name | Teaching Scheme | | | | Total | Evaluation Scheme | | | | | |
| Subject Code | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL | Credit | t Theory Marks | Marks | IE | CIA | Practical / | Total Marks |
| | | | 1 (1113) | | Hrs | Creare | | Marks | Marks | Viva Marks | IVIGIRS | |
| MEA-301 | Automotive aerodynamic and safety | 4 | 2 | 0 | 6 | 6 | 3 | 70 | 30 | 20 | 30 | 150 |
| MEA-302 | Special purpose vehicles | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| MEA-303 A | Elective III Energy conservation and management | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| MEA-303 B | Elective III Computational modeling and simulation | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| MEA-304 | <u>Dissertation Phase - I</u> | 0 | 0 | 16 | 16 | 16 | 0 | 0 | 0 | 50 | 150 | 200 |
| Total | | 11 | 2 | 18 | 31 | 30 | 9 | 210 | 90 | 110 | 210 | 620 |

| Master of Engineering - Automobile Engineering Semester 4 Syllabus | | | | | | | | | | | | |
|--|-------------------------------------|---------|----------|----------|-------|--------|-------------------|---------|-------|-------|-------------|----------------|
| | | | Teaching | g Scheme |) | Total | Evaluation Scheme | | | | | |
| Subject Code | Subject Name | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL | Credit | Theory | I Marks | IE | CIA | Practical / | Total Marks |
| | | | | | Hrs | | Hrs | | Marks | Marks | Viva Marks | IVIAIRS |
| MEA-401 | Mid Semester THESIS PROGRESS REVIEW | 0 | 0 | 15 | 15 | 15 | 0 | 0 | 0 | 50 | 150 | 200 |
| MEA-402 | DISSERTATION PHASE-II | 0 | 0 | 15 | 15 | 15 | 0 | 0 | 0 | 50 | 150 | 200 |
| Total | | 0 | 0 | 30 | 30 | 30 | 0 | 0 | 0 | 100 | 300 | 400 |