

Chemical Engineering (05)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|---|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2180502 | Petroleum Refining & Petrochemicals | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 5 |
| 2180504 | Project -II | 0 | 0 | 8 | 8 | 0 | 0 | 80 | 20 | 100 | 5 |
| 2180503 | Process Modeling, Simulation & Optimization | 4 | 0 | 3 | 7 | 70 | 30 | 30 | 20 | 150 | 5 |
| 2180507 | Transport Phenomena | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 5 |
| | Department Elective - III | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 5 |
| | Total | 14 | 2 | 13 | 29 | | | | | | |

Departmental Elective III

| | |
|-------------------------|------------------------------|
| 2180505 | Multi Component Distillation |
| 2180508 | Solid-fluid operations |
| 2180509 | Fertilizer Technology |

Civil Engineering (06)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|---|-------------------------|-----------------|------------------|----------------|---------------|---------------|---------------------|--------------|--------------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2180605 | Project -II | 0 | 0 | 8 | 8 | 0 | 0 | 80 | 20 | 100 | 6 |
| 2180609 | Foundation Engineering | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 6 |
| 2180610 | Design of Steel Structures | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 6 |
| 2180611 | Construction Management | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 6 |
| | Departmental Elective - III* | 3 | 1 | 0 | 4 | 70 | 30 | 30 | 20 | 150 | 6 |
| | Total | 12 | 5 | 10 | 27 | | | | | | |
| | Departmental Elective III: | Theory | Tutorial | Practical | Credits | ESE(E) | PA (M) | Viva (V) | PA(I) | Total Marks | |
| 2180601 | Design of Hydraulic Structures | 3 | 1 | 0 | 4 | 70 | 30 | 30 | 20 | 150 | 6 |
| 2180607 | Repairs & Rehabilitation of Concrete Structures | 3 | 1 | 0 | 4 | 70 | 30 | 30 | 20 | 150 | 6 |
| 2180612 | Design of Prestressed Concrete Structures & Bridg | 3 | 1 | 0 | 4 | 70 | 30 | 30 | 20 | 150 | 6 |
| 2180602 | Harbour & Airport Engineering | 3 | 1 | 0 | 4 | 70 | 30 | 30 | 20 | 150 | 6 |
| 2180613 | Glass Facade Engineering | 3 | 0 | 1 | 4 | 70 | 30 | 30 | 20 | 150 | 6 |

* Credits will vary as per the syllabus of the concern subject in tutorial and Practical as per above table

Computer Engineering (07), Computer Science & Engineering (31)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|-----------------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2180703 | Artificial Intelligence | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 7 |
| | Departmental Elective - III | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 7 |
| 2180706 | Project (Phase-II) | 0 | 0 | 16 | 16 | 0 | 0 | 80 | 20 | 100 | 7 |
| | Total | 7 | 0 | 20 | 27 | | | | | | |

Departmental Elective III

| | |
|-------------------------|-----------------------------------|
| 2180709 | IOT and Applications |
| 2180710 | Big Data Analytics |
| 2180711 | Python Programming |
| 2180712 | Cloud Infrastructure and Services |
| 2180713 | Web data Management |
| 2180714 | iOS Programming |
| 2180715 | Android Programming |

Electrical & Electronics Engineering (08)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|--|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2180806 | Project | 0 | 0 | 12 | 12 | 0 | 0 | 80 | 20 | 100 | 8 |
| 2180901 | Testing and Commissioning of Electrical Equipments | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 8 |
| 2180807 | Industrial Automation | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 8 |
| | Departmental Elective - III | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 8 |
| | Total | 10 | 0 | 18 | 28 | | | | | | |

Departmental Elective III

| | |
|-------------------------|--------------------------|
| 2180808 | Embedded Systems |
| 2180913 | Advanced Control Systems |
| 2180912 | Condition Monitoring |

Electrical Engineering (09)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-----------------------------------|--|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2180903 | Power System Planning and Design | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 9 |
| 2180905 | Project | 0 | 0 | 10 | 10 | 0 | 0 | 80 | 20 | 100 | 9 |
| 2180901 | Testing and Commissioning of Electrical Equipments | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 9 |
| | Departmental Elective - III | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 9 |
| 2180909 | Power System Operation and Control | 4 | 0 | 0 | 4 | 70 | 30 | 0 | 0 | 100 | 9 |
| | Total | 13 | 0 | 16 | 29 | | | | | | |
| Departmental Elective III: | | | | | | | | | | | |
| 2180910 | Energy Conservation, and Audit | | | | | | | | | | |
| 2180911 | Power Quality and Management | | | | | | | | | | |
| 2180912 | Condition Monitoring | | | | | | | | | | |
| 2180913 | Advanced Control Systems | | | | | | | | | | |

Electronics Engineering (10)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|-----------------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| | Departmental Elective - III | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 10 |
| 2181005 | Project | 0 | 0 | 22 | 22 | 0 | 0 | 80 | 20 | 100 | 10 |
| | Total | 4 | 0 | 24 | 28 | | | | | | |

Departmental Elective II

| | |
|-------------------------|---------------------------------|
| 2181102 | Fandamental of Image Processing |
| 2181007 | Satellite Commmunication |
| 2181006 | Advance Microprocessor |

Electronics & Communication Engineering (11), Electronics & Telecommunication Engineering (12)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|-----------------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| | Departmental Elective - III | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 11 |
| 2181105 | Project II | 0 | 0 | 22 | 22 | 0 | 0 | 80 | 20 | 100 | 11 |
| | Total | 4 | 0 | 24 | 28 | | | | | | |

Departmental Elective III:

| | |
|-------------------------|----------------------------------|
| 2181102 | Fundamentals of Image Processing |
| 2181103 | Radar & Navigational Aids |
| 2181106 | Device Driver & Writing |
| 2181107 | Testing And Verification |

Environmental Engineering (13), Environmental Science & Engineering(37)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|--|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2181302 | Environmental Impact Assessment | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 13 |
| 2181308 | Advanced Wastewater Treatment Technologies | 4 | 2 | 0 | 6 | 70 | 30 | 30 | 20 | 150 | 13 |
| 2181306 | Project II | 0 | 0 | 6 | 6 | 0 | 0 | 80 | 20 | 100 | 13 |
| 2181307 | Design of Air Pollution Control Equipments | 4 | 4 | 0 | 8 | 70 | 30 | 30 | 20 | 150 | 13 |
| | Departmental Elective - III | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 13 |
| | Total | 14 | 10 | 6 | 30 | | | | | | |

Departmental Elective III:

| | |
|-------------------------|-------------------------------------|
| 2181304 | Environmental Legislation & Audit |
| 2181309 | Preventive Environmental Management |

Food Processing & Technology (14)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|--------------|--------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2181403 | Industrial Project | 0 | 0 | 30 | 30 | 0 | 0 | 80 | 20 | 100 | 14 |
| | Total | 0 | 0 | 30 | 30 | | | | | | |

Industrial Engineering (15)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|--------------|-------------------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2181501 | Project Management | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 15 |
| 2181502 | Management of Human Resources | 4 | 2 | 0 | 6 | 70 | 30 | 30 | 20 | 150 | 15 |
| | Department Elective - III | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 15 |
| 2181505 | Project II | 0 | 0 | 12 | 12 | 0 | 0 | 80 | 20 | 100 | 15 |
| | TOTAL | 12 | 2 | 16 | 30 | | | | | | |

Departmental Elective III:

| | |
|---------|-------------------------------|
| 2181503 | Management Information System |
| 2181504 | Industrial Ergonomics |

Information Technology (16)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|--------------|-----------------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2180703 | Artificial Intelligence | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 16 |
| | Departmental Elective - III | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 16 |
| 2181606 | Project (Phase-II) | 0 | 0 | 16 | 16 | 0 | 0 | 80 | 20 | 100 | 16 |
| | Total | 0 | 0 | 16 | 27 | | | | | | |

Departmental Elective III

| | |
|---------|-----------------------------------|
| 2180709 | IOT and Applications |
| 2180711 | Python Programming |
| 2181607 | Multimedia and Animation |
| 2180713 | Web data Management |
| 2180712 | Cloud Infrastructure and Services |
| 2180714 | iOS Programming |
| 2180715 | Android Programming |

Instrumentation & Control Engineering (17)

| SEM - VIII | | | | | | | | | | | |
|-----------------------------------|---|-------------------------|----------|-----------|-----------|---------------------|-------|--------------------|-------|-------------|-------------|
| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | University Exam (E) | | Tutorial/Practical | | Total Marks | Branch Code |
| | | Theory | Tutorial | Practical | | ESE(E) | PA(M) | Viva(V) | PA(I) | | |
| | Departmental Elective - III | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 17 |
| 2181704 | Project Engineering and Management | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 17 |
| 2181705 | Advance Control Theory | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 17 |
| 2181703 | Project II | 0 | 0 | 12 | 12 | 0 | 0 | 80 | 20 | 100 | 17 |
| | Total | 12 | 2 | 16 | 30 | | | | | | |
| Departmental Elective III: | | | | | | | | | | | |
| 2181706 | Robotic Engineering | | | | | | | | | | |
| 2181707 | Instrumentation for Agriculture and Food Processing | | | | | | | | | | |
| 2181708 | Automotive Instrumentation | | | | | | | | | | |
| 2181710 | Soft Computing in Control | | | | | | | | | | |

Mechanical Engineering (19)

| Semester VIII | | | | | | | | | | | |
|----------------------------------|--------------------------------------|-------------------------|-----------------|------------------|----------------|---------------|---------------|---------------------|--------------|--------------------|-------------|
| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2181909 | Project II | 0 | 0 | 16 | 16 | 0 | 0 | 80 | 20 | 100 | 19 |
| 2181910 | Renewable Energy Engineering | 4 | 0 | 0 | 4 | 70 | 30 | 0 | 0 | 100 | 19 |
| | Department Elective II* | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| | Department Elective III* | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| | Total | 10 | 0 | 20 | 30 | | | | | | |
| Departmental Elective II: | | Theory | Tutorial | Practical | Credits | ESE(E) | PA (M) | Viva (V) | PA(I) | Total Marks | |
| 2181911 | Finite Elements Method | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181912 | Optimization | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181913 | Product Design and Value Engineering | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181914 | Rapid Prototyping | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181915 | Automobile Engineering | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181916 | Energy Conservation and Management | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181917 | Cryogenic Engineering | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181918 | Principles of Combustion Engineering | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |

| Departmental Elective III: | | | | | | | | | | | |
|-----------------------------------|---------------------------------------|---|---|---|---|----|----|----|----|-----|----|
| 2181919 | Robotics | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181920 | Quality Engineering | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181921 | Design for Manufacturing and Assembly | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181922 | Automation | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181923 | Entrepreneurship | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181924 | Design of Heat Exchanger | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181925 | Computational Fluid Dynamics | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181926 | Tribology | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |
| 2181927 | Advance Welding Technology | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 19 |

* Credits will vary as per the syllabus of the concern subject in tutorial and Practical as per above table

Mechatronics Engineering (20)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|----------------------------------|---------------------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2182001 | Programmable Logic Controllers | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 20 |
| 2182002 | Automated Manufacturing - II | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 20 |
| 2182003 | Quality Assurance & Reliability | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 20 |
| 2182004 | Design of Mechanisms - II | 3 | 1 | 0 | 4 | 70 | 30 | 30 | 20 | 150 | 20 |
| 2182005 | Project - II | 0 | 0 | 8 | 8 | 0 | 0 | 80 | 20 | 100 | 20 |
| | Departmental Elective - III | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 20 |
| | Total | 16 | 0 | 14 | 30 | | | | | | |
| Departmental Elective III | | | | | | | | | | | |
| 2182006 | Machine Vision | | | | | | | | | | |
| 2182008 | MEMS and Nanotechnology | | | | | | | | | | |
| 2181915 | Automobile Engineering | | | | | | | | | | |

Metallurgy Engineering (21)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|--------------|---|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2182102 | Material selection and Failure Analysis | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 21 |
| 2182103 | Composite Materials | 4 | 1 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 21 |
| | Department Elective -II | 4 | 2 | 0 | 6 | 70 | 30 | 30 | 20 | 150 | 21 |
| | Department Elective -III | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 21 |
| 2182107 | Research paper review and presentation | 0 | 0 | 2 | 2 | 0 | 0 | 80 | 20 | 100 | 21 |
| 2182106 | Project II | 0 | 0 | 6 | 6 | 0 | 0 | 80 | 20 | 100 | 21 |
| | Total | 16 | 3 | 12 | 31 | | | | | | |

| Departmental Elective II | |
|----------------------------------|---|
| 2182108 | Advanced Non Ferrous Extractive Metallurgy |
| 2182109 | Quality Engineering & Industrial Safety |
| 2182110 | Engineering Estimation and Costing |
| 2182111 | Ceramic and Polymer Materials |
| Departmental Elective III | |
| 2182112 | Industrial Corrosion, Testing, Prevention & Control |
| 2182113 | Computational Metallurgy |
| 2182114 | Thin Film and Nano-Technology |
| 2182115 | Alloy Design |

| Mining Engineering (22) |
|--------------------------------|
|--------------------------------|

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|--|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2182201 | Mine & Mineral Economics | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 22 |
| 2182202 | Advance Mining Methods | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 22 |
| 2182203 | Mining & Processing of Dimensional Stone | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 22 |
| 2182204 | Mine Safety Engineering | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 22 |
| 2182205 | Project-II | 0 | 0 | 12 | 12 | 0 | 0 | 80 | 20 | 100 | 22 |
| | Departmental Elective - III | 2 | 0 | 2 | 4 | 70 | 30 | 30 | 20 | 150 | 22 |
| | Total | 14 | 0 | 16 | 30 | | | | | | |

| Departmental Elective III | |
|----------------------------------|---|
| 2182206 | Underground Space Technology |
| 2182207 | Geological Exploration Mineral Deposits |

Plastic Technology (23)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|-------------------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2182307 | Advanced Plastic Mould Design | 3 | 0 | 3 | 6 | 70 | 30 | 30 | 20 | 150 | 23 |
| 2182302 | Polymer Alloys and Blends | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 23 |
| 2182308 | Plastic Product Design | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 23 |
| 2182306 | Project-2 | 0 | 0 | 8 | 8 | 0 | 0 | 80 | 20 | 100 | 23 |
| | Departmental Elective - III | 3 | 0 | 3 | 6 | 70 | 30 | 30 | 20 | 150 | 23 |
| | Total | 12 | 0 | 18 | 30 | | | | | | |

Departmental Elective III:

| | |
|-------------------------|-------------------------------|
| 2182309 | Nano Polymer Technology |
| 2182310 | Mold Manufacturing Technology |

Power Electronics (24)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|--------------------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2182401 | Power Electronics Applications | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 24 |
| 2182406 | Project-II | 0 | 0 | 12 | 12 | 0 | 0 | 80 | 20 | 100 | 24 |
| 2182407 | Switch Gear & Protection | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 24 |
| | Dept. Electives – III | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 24 |
| | Total | 12 | 0 | 18 | 30 | | | | | | |

Departmental Elective III:

| | |
|-------------------------|---|
| 2182408 | Programmable Logic Controller for Power Electronics |
| 2182409 | Advanced Electrical Machines and Drives |
| 2182410 | Digital Signal Controllers |

Textile Processing (28)

| SEM - VIII | | | | | | | | | | | |
|-------------------------|--|-------------------------|----------|-----------|-----------|--------------|--------|--------------------|-------|-------------|-------------|
| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/Practical | | Total Marks | Branch Code |
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| | Departmental Elective - III | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 28 |
| 2182801 | Technology of Dyeing - III | 4 | 0 | 3 | 7 | 70 | 30 | 30 | 20 | 150 | 28 |
| 2182802 | Technological Advances in Textile Processing | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 28 |
| 2182803 | Dye House Management | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 28 |
| 2182806 | Project - II | 0 | 0 | 12 | 12 | 0 | 0 | 80 | 20 | 100 | 28 |
| | Total | 13 | 0 | 17 | 30 | | | | | | |

Departmental Elective III:

| | |
|-------------------------|---|
| 2182804 | Quality Control in Wet Processing |
| 2182805 | Advanced Textile Processing Machineries |

Textile Technology (29)

| Semester VIII | | | | | | | | | | | |
|-------------------------|---------------------------------------|-------------------------|----------|-----------|-----------|--------------|--------|---------------------|-------|-------------|-------------|
| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| | Departmental Elective - III | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 29 |
| 2182907 | Process & Quality Control in Spinning | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 29 |
| 2182902 | Process & Quality Control in Weaving | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 29 |
| 2182901 | Principles of Textile Processes | 4 | 0 | 0 | 4 | 70 | 30 | 0 | 0 | 100 | 29 |
| 2182903 | Technical Textile-II | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 29 |
| 2182904 | Project II | 0 | 0 | 12 | 12 | 0 | 0 | 80 | 20 | 100 | 29 |
| | Total | 16 | 0 | 14 | 30 | | | | | | |

Departmental Elective III:

| | |
|-------------------------|-------------------------------------|
| 2182905 | Surface Ornamentation & Fashion Art |
| 2182908 | Technology of Denim Manufacturing |

Information & Communication Technology (32)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|-----------------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2180703 | Artificial Intelligence | 4 | 0 | 2 | 6 | 70 | 30 | 30 | 20 | 150 | 32 |
| | Departmental Elective - III | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 32 |
| 2183206 | Project (Phase-II) | 0 | 0 | 16 | 16 | 0 | 0 | 80 | 20 | 100 | 32 |
| | Total | 7 | 0 | 20 | 27 | | | | | | |

Departmental Elective III

| | |
|-------------------------|------------------------------|
| 2180709 | IOT and Applications |
| 2180710 | Big Data Analytics |
| 2183202 | Systems and Network Security |
| 2183201 | Multimedia Computing |
| | |

Manufacturing Engineering(34)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|---------------------------------------|-------------------------|-----------------|------------------|----------------|---------------|---------------|---------------------|--------------|--------------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2181921 | Design for Manufacturing and Assembly | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 34 |
| 2183408 | Product Design & Development | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 34 |
| | Department Elective- III* | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 34 |
| 2183406 | Project - II | 0 | 0 | 15 | 15 | 0 | 0 | 80 | 20 | 100 | 34 |
| | TOTAL | 9 | 4 | 17 | 30 | | | | | | |
| | Department Elective- III | Theory | Tutorial | Practical | Credits | ESE(E) | PA (M) | Viva (V) | PA(I) | Total Marks | |
| 2183409 | Composite Technology | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 34 |
| 2181923 | Entrepreneurship | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 34 |
| 2181922 | Automation | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 34 |
| 2182501 | Production and Operations Management | 3 | 2 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 34 |
| 2181919 | Robotics | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 34 |

* Credits will vary as per the syllabus of the concern subject in tutorial and Practical as per above table

Environmental Science and Technology (35)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|-------------------------------------|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| | Department Elective - III | 3 | 0 | 2 | 5 | 70 | 30 | 30 | 20 | 150 | 35 |
| 2183507 | Design of Treatment Plants | 4 | 1 | 2 | 7 | 70 | 30 | 30 | 20 | 150 | 35 |
| 2183508 | Municipal Waste & Sewage Management | 4 | 1 | 0 | 5 | 70 | 30 | 30 | 20 | 150 | 35 |
| 2183509 | Environmental Management - III | 4 | 1 | 0 | 5 | 70 | 30 | 30 | 20 | 100 | 35 |
| 2183506 | Project – II | 0 | 0 | 8 | 8 | 0 | 0 | 80 | 20 | 100 | 35 |
| | TOTAL | 15 | 3 | 12 | 30 | | | | | | |

Department Elective- III

| Code | Name of the subject |
|-------------------------|--|
| 2183504 | Sustainable Development & Green Technologies |
| 2183510 | Water Supply & Management |

Chemical Technology (36)

Semester VIII

| Subject code | Subject name | Teaching Scheme (Hours) | | | Credits | Theory Marks | | Tutorial/ Practical | | Total Marks | Branch Code |
|-------------------------|---|-------------------------|----------|-----------|---------|--------------|--------|---------------------|-------|-------------|-------------|
| | | Theory | Tutorial | Practical | | ESE(E) | PA (M) | Viva (V) | PA(I) | | |
| 2183605 | Project – II | 0 | 0 | 10 | 10 | 0 | 0 | 80 | 20 | 100 | 36 |
| | Department Elective – IX | 4 | 0 | 3 | 7 | 70 | 30 | 30 | 20 | 150 | 36 |
| 2183607 | Process Instrumentation, Dynamics & Control | 3 | 0 | 3 | 6 | 70 | 30 | 30 | 20 | 150 | 36 |
| 2183608 | Chemical Process Technology | 3 | 0 | 0 | 3 | 70 | 30 | 0 | 0 | 100 | 36 |
| | Department Elective – X | 4 | 0 | 0 | 4 | 70 | 30 | 0 | 0 | 100 | 36 |
| | Total | 14 | 0 | 16 | 30 | | | | | | |

Department Elective- IX

| Code | Name of the subject |
|-------------------------|--|
| 2183601 | Drug Delivery, Biotechnology & Validation Requirement |
| 2183602 | Design & Fabrication of Molds |
| 2183606 | Physical Ceramics |
| 2183609 | Analysis, Applications, Health and Safety Aspects of Dyes & Pigments |

Department Elective-X

| Code | Name of the subject |
|-------------------------|--|
| 2183610 | Nanoscience Technology and Pharmaceutical Packaging Technology |
| 2183611 | Recycling and Packaging of Polymer and Rubber |

