| | Cou | rse Structu | e Semester I | 11 | | | |
|----|-------------------------------------|----------------------------------|---------------|---------------|----------------|---------|--------|
| Sr | Subject | Lectures hours per week | per hours per | | ination eme | | Remark |
| No | | | | Final Exam | ICE | Credits | |
| 1 | Process Calculation-I | 3 | 0 | 70 | 30 | 3 | |
| 2 | Fluid Mechanics-I | 3 | 2 | 70 | 30 | 4 | |
| 3 | Strength of Material & Fabrication | 3 | 2 | 70 | 30 | 4 | |
| 4 | Heat Transfer Operations | 3 | 2 | 70 | 30 | 4 | |
| 5 | Chemical Engineering Thermodynamics | 3 | 2 | 70 | 30 | 4 | |
| 6 | Principles of Chemical Reactions | 3 | 2 | 70 | 30 | 4 | |
| 7 | Engineering Mathematics-III | 3 | 2 | 70 | 30 | 4 | |
| | | 21 | 72 | 490 | 210 | 27 | |

| | Con | arse Structu | re Semester IV | 1 | | | |
|----------|--|-------------------|---------------------------|---------------|----------------|---------|--------|
| Sr No | | Lectures Tutorial | Practicals / Tutorials | | ination eme | | Remark |
| | Subject | | hours per week | Final Exam | ICE | Credits | |
| 1 | Process Calculation-II | 3 | 0 | 70 | 30 | 3 | |
| 2 | Fluid Mechanics-II | 3 | 0 | 70 | 30 | 3 | |
| 3 | Mass Transfer Operations-I | 3 | 2 | 70 | 30 | 4 | |
| 4 | Solid Fluid Mechanical Operations | 3 | 2 | 70 | 30 | 4 | |
| 5 | Unit Processes in Chemical Industries | 3 | 2 | 70 | 30 | 4 | |
| 6 | Material Selection | 3 | 0 | 70 | 30 | 3 | |
| 7 | Process Equipment & Accessories Design | 3 | 2 | 70 | 30 | 4 | |
| | | 21 | 8 | 490 | 210 | 25 | |



| | Cou | ırse Structu | re Semester | IX * | | | |
|----------|-----------------|----------------------|--------------------------------|-----------------------|-----|---------|--------|
| Sr No | | Lectures | Practicals / | Examination Scheme | | | Remark |
| | Subject | hours per week | Tutorials hours per week | Final exam | ICE | Credits | |
| 2 | Design Report I | 0 | 6 | 0 | 100 | 2 | |
| | | 0 | 6 | 0 | 100 | 2 | |

Note: *Semester teaching is of 10 weeks.

| | C | ourse Struc | ture Semeste | er X | | | |
|----------|------------------|------------------|-------------------|-----------------------|-----|---------|--------|
| Sr No | Subject | Lectures Practic | | Examination Scheme | | | Remark |
| | | per week | hours per week | Final exam | ICE | Credits | |
| 1 | Design Report II | 0 | 4 | 0 | 100 | 2 | |
| | | 0 | 4 | 0 | 100 | 2 | |



| | | Con | arse Structure | Semester V | | | |
|----------|---|-------------------|-------------------|-----------------------|-----|---------|--------|
| Sr No | Subject | Lectures | | Examination Scheme | | | |
| | | hours per week | hours per week | Final Exam | ICE | Credits | Remark |
| 1 | Chemical Processes-I | 3 | 2 | 70 | 30 | 4 | |
| 2 | Reaction Kinetics | 3 | 2 | 70 | 30 | 4 | |
| 3 | Mass Transfer Operations-II | 3 | 2 | 70 | 30 | 4 | |
| 4 | Plant Utilities | 3 | 2 | 70 | 30 | 4 | |
| 5 | Energy System Designs | 3 | 2 | 70 | 30 | 4 | |
| - | P. CO. C. | 15 | 10 | 350 | 150 | 20 | |

| | | Lectures | Practicals/ Tutorials | Examination Scheme | | | |
|----------|---|-------------------|--------------------------|-----------------------|-----|---------|---------|
| Sr No | Subject | hours per week | hours per week | Final Exam | ICE | Credits | Remark |
| 1 | Chemical Processes- | 3 | 2 | 70 | 30 | 4 | |
| 2 | Chemical Reaction Engineering | 3 | 2 | 70 | 30 | 4 | <u></u> |
| 3 | Instrumentation & Process Control | 3 | 2 | 70 | 30 | 4 | |
| 4 | Process Optimization & simulation | 3 | 2 | 70 | 30 | 4 | |
| 5 | Industrial Safety | 3 | 2 | 70 | 30 | 4 | |
| | | 15 | 10 | 350 | 150 | 20 | |



| | Co | urse Structur | e Semester VI | II. | | | |
|-------|--|-------------------------------|---|--------------------|-----|---------|--------|
| Sr No | Subject | Lectures hours per week | Practicals/ Tutorials hours per week | Examination Scheme | | | |
| | | | | Final Exam | ICE | Credits | Remark |
| 1 | Environmental Engineering | 3 | 2 | 70 | 30 | 4 | |
| 2 | TIP 08 Weeks TIP Evaluation & Viva | 0 | 40 | 0 | 200 | 10 | |
| 3 | Project & Process Engineering | 3 | 2 | 70 | 30 | 4 | |
| | | 9 | 46 | 140 | 240 | 22 | |

| | | Cour | e Structure S | emester V | 11 | | |
|-------|--------------------------------------|-----------|--------------------------|-----------|------------------|---------|--------|
| Sr No | Subject Lectures hours per week | Lectures | Practicals/ Tutorials | | nination home | Credits | Remark |
| | | hours per | Final Exam | ICE | | | |
| 1 | Economics of Chemical Projects | 3 | 2 | 70 | 30 | 4 | |
| 2 | Seminar 1 | 0 | 2 | 0 | 50 | 1 | |
| 3 | Technical Elective | 3 | 0 | 70 | 30 | 3 | |
| | | 9 | 6 | 140 | 110 | 12 | |

