

Process Engineering Programme Structure (Full Time)  
 AY 2024/2025

|        |            |             |                                    |              |            |                         |                                            |              |               |
|--------|------------|-------------|------------------------------------|--------------|------------|-------------------------|--------------------------------------------|--------------|---------------|
| Year 1 | Semester 1 | Module Code | Module Name                        | Credit Value | Semester 2 | Module Code             | Module Name                                | Credit Value | Pre-Requisite |
|        |            | TENG-I      | Technical English-I                | 5            |            | TENTR                   | Entrepreneurship                           | 0            |               |
|        |            | TMATH-I     | Technical Math-I                   | 10           |            | TENG-II                 | Technical English II                       | 5            | TENG-I        |
|        |            | TCHEM       | General Chemistry                  | 10           |            | TMATH-II                | Technical Math-II                          | 10           | TMATH-I       |
|        |            | TPHYS       | Applied Physics                    | 10           |            | TEC                     | Engineering Chemistry                      | 10           | TCHEM         |
|        |            | TIPT        | Introduction to Process Technology | 10           |            | TBEEE                   | Basic Electrical & Electronics Engineering | 10           |               |
|        |            | THSE        | Health,Safty & Environment         | 10           |            | TCOMP                   | Computer Applications                      | 5            |               |
|        |            | TED         | Engineering Drawing                | 5            |            | TPME                    | Process Mechanical Equipment's             | 10           |               |
|        |            |             |                                    |              | TBWP       | Basic Workshop Practice | 10                                         |              |               |

|        |            |             |                              |              |               |            |             |                                     |              |               |
|--------|------------|-------------|------------------------------|--------------|---------------|------------|-------------|-------------------------------------|--------------|---------------|
| Year 2 | Semester 3 | Module Code | Module Name                  | Credit Value | Pre-Requisite | Semester 4 | Module Code | Module Name                         | Credit Value | Pre-Requisite |
|        |            | TENG-III    | Technical English-III        | 10           | TENG-II       |            | TENG-IV     | Technical English-IV                | 10           | TENG-II       |
|        |            | TEMD        | Electrical Machines & Drives | 10           | TBEEE         |            | TCET        | Chemical Engineering Thermodynamics | 10           | TEC           |
|        |            | TPI         | Process Instrumentation      | 10           |               |            | TICHEM      | Industrial Chemistry                | 10           | TCHEM         |
|        |            | TPSC        | Process Simulation & Control | 10           |               |            | TPC         | Process Control                     | 10           |               |
|        |            | TAFM        | Applied Fluid Mechanics      | 10           | TPHYS         |            | TPTS        | Process Technology & Systems        | 10           |               |
|        |            | TMTP        | Machine Tools Practice       | 10           | TBWP          |            | TPT         | Process Troubleshooting             | 10           | TPSC          |
|        |            |             |                              |              |               |            |             |                                     |              |               |

|        |            |             |                                       |              |                     |            |             |                |              |                                  |
|--------|------------|-------------|---------------------------------------|--------------|---------------------|------------|-------------|----------------|--------------|----------------------------------|
| Year 3 | Semester 5 | Module Code | Module Name                           | Credit Value | Pre-Requisite       | Semester 6 | Module Code | Module Name    | Credit Value | Pre-Requisite                    |
|        |            | TMATH-III   | Applied Maths for Process Engineering | 10           | TMATH-II            |            | TAP         | Apprenticeship | 60           | Minimum of 240 credits completed |
|        |            | TACHEM      | Analytical Chemistry                  | 10           | TCHEM               |            |             |                |              |                                  |
|        |            | TPS         | Process System Safety                 | 10           | THSE                |            |             |                |              |                                  |
|        |            | TEM         | Engineering Materials                 | 10           | TPHYS               |            |             |                |              |                                  |
|        |            | TCPC        | Chemical Process Calculations         | 10           | TEC                 |            |             |                |              |                                  |
|        |            | TPSEB       | Process Systems Energy Balance        | 10           | TCPC (Co-Requisite) |            |             |                |              |                                  |
|        |            |             |                                       |              |                     |            |             |                |              |                                  |

|        |            |             |                                 |              |                     |            |             |                                         |              |               |  |  |
|--------|------------|-------------|---------------------------------|--------------|---------------------|------------|-------------|-----------------------------------------|--------------|---------------|--|--|
| Year 4 | Semester 7 | Module Code | Module Name                     | Credit Value | Pre-Requisite       | Semester 8 | Module Code | Module Name                             | Credit Value | Pre-Requisite |  |  |
|        |            | TSCOL       | Separation Columns              | 10           | TCPC+TPSEB          |            | TPRO-II     | Final Year Project-II                   | 20           | TPRO-I        |  |  |
|        |            | THTHE       | Heat Transfer & Heat Exchangers | 10           | TPSEB + TAFM + TCET |            | TPUSS       | Process Unit Start-up & Shut Down       | 10           | TPSC          |  |  |
|        |            | TPEE        | Process Engineering Economics   | 10           | TCPC + TIPT         |            | TIBM        | Industrial Business Management          | 10           |               |  |  |
|        |            | TPRO-I      | Final Year Project-I            | 20           | TCPC+TPSEB          |            | TENG-V      | Business Correspondence & Communication | 10           | TENG-II       |  |  |
|        |            | TPED        | Process Equipment's Design      | 10           | TCPC + TPEE         |            | TSQC        | Statistical Quality Control             | 10           | TMATH II      |  |  |
|        |            |             |                                 |              |                     |            |             |                                         |              |               |  |  |
|        |            |             |                                 |              |                     |            |             |                                         |              |               |  |  |