

| M.Tech.Programme in Manufacturing Systems Engineering | | | | | | | |
|--|-----------|---|----|---|----|-----|---------|
| Semester-I | | | | | | | |
| S.No. | Sub. Code | Subject Name | L | T | P | Hrs | credits |
| 1 | MET 811 | Design of Experiments | 3 | 1 | 0 | 4 | 4 |
| 2 | MET 812 | Theory of Metal cutting | 3 | 1 | 0 | 4 | 4 |
| 3 | MEP 812 | Theory of Metal cutting Lab | 0 | 0 | 2 | 2 | 1 |
| 4 | MET 813 | Modeling and simulation of Manufacturing Systems | 3 | 1 | 0 | 4 | 4 |
| 5 | MEP 813 | Modeling and simulation of Manufacturing Systems Lab | 0 | 0 | 2 | 2 | 1 |
| 6 | MET 814 | Computer Intergrated Manufacturing Systems | 3 | 1 | 0 | 4 | 4 |
| 7 | MET 815 | Elective-I | 3 | 1 | 0 | 4 | 4 |
| | | Total | 15 | 5 | 4 | 24 | 22 |
| Semester-II (A) | | | | | | | |
| S.No. | Sub. Code | Subject Name | L | T | P | Hrs | credits |
| 1 | MET 821 | Advanced Machining Processes and Analysis | 3 | 1 | 0 | 4 | 4 |
| 2 | MET 822 | Industrial Automation & Mechatronics | 3 | 1 | 0 | 4 | 4 |
| 3 | MEP 822 | Industrial Automation & Mechatronics Lab | 0 | 0 | 2 | 2 | 1 |
| 4 | MET 823 | Advanced Optimization Techniques | 3 | 1 | 0 | 4 | 4 |
| 5 | MET 824 | Production Management and Quality Engineering | 3 | 1 | 0 | 4 | 4 |
| 6 | MET 825 | Elective-II | 3 | 1 | 0 | 4 | 4 |
| 7 | MEP 826 | Seminar/Minor Project | 0 | 0 | 2 | 2 | 1 |
| | | Total | 15 | 5 | 4 | 24 | 22 |
| Semester-II (B) | | | | | | | |
| | TP 801 | Four week trianing in reputed Industry/Laboratory in Institutions of repute such as IITs, NITs, CSIR, DRDO, CSIO etc. | | | | | S/US |
| Semester-III | | | | | | | |
| S.No. | Sub. Code | Subject Name | L | T | P | Hrs | credits |
| 1 | MET 911 | Advanced Metal Forming | 3 | 1 | 0 | 4 | 4 |
| 2 | MET 912 | Elective-III | 3 | 1 | 0 | 4 | 4 |
| 3 | MEP 915 | Dissertation (Part-I) | 0 | 0 | 16 | 16 | 8 |
| | | Total | 6 | 2 | 16 | 24 | 16 |
| Semester-IV | | | | | | | |
| S.No. | Sub. Code | Subject Name | L | T | P | Hrs | credits |
| 1 | MEP 925 | Dissertation (Part-II) | 0 | 0 | 24 | 24 | 12 |
| | | Total | 0 | 0 | 24 | 24 | 12 |
| | | Total Credits : 72 | | | | | |

| Elective-I | | | | | | |
|---------------------|-----------|--|---|---|---|---------|
| S. No. | Sub code | Subject Title | L | P | P | Credits |
| 1. | MET 815 A | Finite Element Methods | 3 | 1 | 0 | 4 |
| 3. | MET 815 B | Diagnostic Maintenance & Monitoring | 3 | 1 | 0 | 4 |
| 4. | MET 815 C | Advanced Fabrication and Joining Process | 3 | 1 | 0 | 4 |
| 5. | MET 815 D | IT in Manufacturing | 3 | 1 | 0 | 4 |
| Elective-II | | | | | | |
| S. No. | Sub Code | Subject Title | L | P | P | Credits |
| 1 | MET 825 A | Fabrication and Processsing of Composite and c | 3 | 1 | 0 | 4 |
| 2 | MET 825 B | Tribology | 3 | 1 | 0 | 4 |
| 3 | MET 825 C | Tool & Die Design | 3 | 1 | 0 | 4 |
| 4 | MET 825 D | Control Systems in Manufacturing | 3 | 1 | 0 | 4 |
| 5 | MET 825 E | Measurement and Industrial Instrumentation | 3 | 1 | 0 | 4 |
| Elective-III | | | | | | |
| S. No. | Sub Code | Subject Title | L | P | P | Credits |
| 1 | MET 912 A | Machine Tool Design | 3 | 1 | 0 | 4 |
| 2 | MET 912 B | Product Design & Development | 3 | 1 | 0 | 4 |
| 3 | MET 912 C | Manufacturing System Analysis | 3 | 1 | 0 | 4 |
| 4 | MET 912 D | Robotics | 3 | 1 | 0 | 4 |