

PROGRAMME : MASTER OF SCIENCE (MANUFACTURING ENGINEERING) (MSMFG)
TYPE : FULL TIME & PART TIME
SUMMARY

| TYPE OF COURSES | CREDIT HOURS | | |
|--------------------------------------|--------------------------|-----------------------------|------------------------|
| | PROGRAM STRUCTURE (MODE) | | |
| | COURSEWORK ONLY (W) | COURSEWORK AND RESEARCH (C) | RESEARCH ONLY (T) |
| A. Core Course | 9 Credits Hours | 9 Credits Hours | 0 credit |
| B. Elective by Specialization | 15 Credits Hours | 6 Credits Hours | N/A |
| C. University Required Course | 6 Credits Hours | 6 Credits Hours | 0 Credit Hour |
| D. Research Courses | 12 Credits Hours | 21credit hours | 42Credit hours |
| TOTAL | 42 Credits Hours | 42 credit hours | 42 credit hours |

A. CORE COURSES

| No. | Course Code | Course Title | Credit Hours | Requisite |
|-----|-------------|--|--------------|-----------|
| 1 | MANU 7002 | Bulk Deformation and Net Shape Manufacturing | 3 | |
| 2 | MANU 7003 | Production System Analysis | 3 | |
| 3. | MANU 7004 | Design for Manufacturing | 3 | |

B. ELECTIVE BY SPECIALIZATION

Select 2 courses for Mixed Mode, Select 5 courses by Course Mode

| No. | Course Code | Course Title | Credit Hours | Requisite |
|---------------------------------|-------------|--|--------------|-----------|
| Manufacturing Technology | | | | |
| 1 | MANU 7011 | Advanced Machining Processes | 3 | |
| 2 | MANU 7012 | Advanced Metal Cutting | 3 | |
| 3 | MANU 7013 | Micro-Meso-Manufacturing | 3 | |
| 4 | MANU 7014 | Precision Manufacturing | 3 | |
| 5 | MANU 7015 | Advanced Computer Aided Manufacturing | 3 | |
| 6 | MANU 7016 | Manufacturing Automation and Robotics | 3 | |
| 7 | MANU 7017 | Computer Integrated Manufacturing System | 3 | |
| Manufacturing System | | | | |
| 1 | MANU 7041 | Engineering Cost Analysis | 3 | |
| 2 | MANU 7042 | Engineering Project Management | 3 | |
| 3 | MANU 7043 | Quality Systems and Management | 3 | |

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|---|-----------|--|---|--|
| 4 | MANU 7044 | Strategic Management for Manufacturing | 3 | |
| 5 | MANU 7045 | Production Scheduling and Sequencing | 3 | |
| 6 | MANU 7046 | Human Factor Engineering | 3 | |
| 7 | MANU 7047 | Supply Chain Management | 3 | |

C. UNIVERSITI REQUIRED COURSE

| No. | Course Code | Course Title | Credit Hours | Pre-requisite |
|-----|-------------|--|--------------|---------------|
| 1 | RKGS 7000 | Values, Technology and Society (For W&C) | 3 | |
| 2 | RKGS 7001 | Values, Technology and Society (For T) | 0 | |
| 3 | MANU 7950 | Research Methodology and Seminar (For W&C) | 3 | |
| 4 | MANU 7951 | Research Methodology and Seminar (For T) | 0 | |

D. RESEARCH COURSES

| No. | Course Code | Course Title | Credit Hours | Pre-requisite |
|---|-------------|--------------------|--------------|---------------|
| Coursework and Research (21 Credit Hours) | | | | |
| 1 | MANU 7994 | Research Proposal | 0 | |
| 2 | MANU 7998 | Dissertation | 21 | MANU 7994 |
| Research only (42 credit hours) | | | | |
| 1 | MANU 7994 | Research Proposal | 0 | |
| 2 | MANU 7999 | Thesis | 42 | MANU 7995 |
| 3 | MANU 7995 | Comprehensive Exam | 0 | MANU7994 |
| Course Mode (12 Credit Hours) | | | | |
| 1 | MANU 7997 | Project Paper | 12 | |

Programme structure Mode:

W- Coursework only

C- Coursework and Research (Mixed Mode)

T- Research Only