DEPARTMENT OF PRODUCTION ENGINEERING

B.Tech. PRODUCTION ENGINEERING (CREDIT SYSTEM)

Curriculum Structure:

Total Minimum credits required for completing the Programme is 180

Semester - III

CODE	SUBJECTS	L	T	P	CREDITS
MA 201	Fourier Series and Partial Differential Equations	3	1	0	4
CE 293	Strength of Materials	3	0	0	3
EE 245	Applied Electronics	3	0	0	3
PR 201	Engineering Materials	3	0	0	3
PR 203	Casting Technology	3	0	0	3
PR 205	Machining Technology	3	0	0	3
PR 211	Workshop Practice -1	0	0	3	2
CE 295	Strength of Materials Lab.	0	0	2	1
		18	1	5	22

Semester - IV

CODE	SUBJECTS	L	T	P	CREDITS
MA 202	Numerical Techniques	3	1	0	4
EE 242	Electrical and Control Systems Engineering	3	0	0	3
CE 282	Fluid Mechanics and Machinery	3	0	0	3
PR 202	Kinematics and Dynamics of Machines	3	1	0	4
PR 204	Metal Forming Processes	3	0	0	3
PR 206	Welding Technology	3	0	0	3
EE 244	Electrical and Electronics Engineering Lab.	0	0	2	1
CE 284	Fluid Machinery Lab.	0	0	2	1
PR 212	Workshop Practice – II	0	0	3	2
		18	2	7	24

Semester - V

CODE	SUBJECTS	L	T	P	CREDITS
MA303	Applied Statistics	3	0	0	3
PR 301	Metrology and Quality Assurance	3	0	0	3
PR 303	Design of Machine Elements	3	0	0	3
PR 305	Non Traditional Manufacturing Processes	3	0	0	3
PR 307	Design for Manufacturing and Assembly	3	0	0	3
ME 325	Thermal Engineering	3	0	0	3
PR 311	Machine Drawing	1	0	3	2
ME 331	Thermal Engineering Lab. and Metrology Lab.	0	0	2	1
		19	0	5	21

Semester - VI

CODE	SUBJECTS	L	T	P	CREDITS
PR 302	Resource Management Techniques	3	1	0	4
PR 304	Computer Graphics and CAD	3	0	0	3
PR 306	Design of Production Tooling	3	1	0	4
PR 308	Reliability, Maintenance and Safety Engineering	3	0	0	3
PR 310	CNC Machines	3	0	0	3
-------	Elective – I	3	0	0	3
PR 312	Computer aided Drafting And Cost Estimation	1	0	3	2
PR 314	CNC Laboratory.	0	0	3	2
PR 316	Production Process lab	0	0	3	2
		19	2	9	26

Semester -VII

CODE	SUBJECTS	L	T	P	CREDITS
HM401	Industrial Economics	3	0	0	3
\PR 401	Manufacturing System Simulation	3	0	0	3
PR 403	Machine Tool Control and Mechatronics	3	0	0	3
-------	Elective – II	3	0	0	3
-------	Elective -III	3	0	0	3
PR 411	Mechatronics Lab. and Manufacturing System Simulation Lab.	0	0	4	2
PR 413	Colloquium	0	0	2	1
PR 447	Comprehensive Evaluation	0	3	0	3
		15	3	6	21

Semester –VIII

CODE	SUBJECTS	L	T	P	CREDITS
PR 402	Manufacturing Planning and Control	3	0	0	3
PR 404	Automation and CIM	3	0	0	3
PR 406	Work Design and Facilities Planning	3	0	0	3
--------	Elective - IV	3	0	0	3
--------	Elective -V	3	0	0	3
PR 498	Project Work	-	-	12	6
	`	15	0	12	21

List of Electives:

CODE	SUBJECTS	L	T	P	CREDITS
Elective I					
PR 352	Design and Analysis of Experiments	3	0	0	3
PR 354	Material Handling and Storage	3	0	0	3
PR 356	Newer Trends in Manufacturing	3	0	0	3
Elective II & III					
PR 451	Agile Manufacturing	3	0	0	3
PR 453	Finite Element Method	3	0	0	3
PR 455	Operations Management	3	0	0	3
PR 457	Rapid prototyping, tooling And manufacture	3	0	0	3
PR 459	Supply Chain Management	3	0	0	3
ME 471	Automobile Engineering	3	0	0	3
Or any other elective subject from any other department					
Elective IV & V					
PR 450	Artificial Intelligence and Expert Systems	3	0	0	3
PR 452	Design and Manufacturing of Composite Materials	3	0	0	3
PR 454	Machine Tool Technology	3	0	0	3
PR 456	Project Management	3	0	0	3
PR 458	Value Engineering	3	0	0	3
HM 412	Entrepreneurship Development	3	0	0	3
Or any other elective subject from any other department					

List of reserve Electives:

CODE	SUBJECTS	L	T	P	CREDITS
PR 461	Industrial Robotics	3	0	0	3
PR 462	Integrated Materials Management	3	0	0	3
PR 463	Lean Manufacturing	3	0	0	3
PR 464	Mechatronics	3	0	0	3
PR 465	Manufacturing Costs and Analysis	3	0	0	3
PR 466	Manufacturing of Polymer Composites	3	0	0	3
PR 467	Plant Engineering	3	0	0	3
ME473	Refrigeration and Air Conditioning	3	0	0	3
MB 471	Financial Management	3	0	0	3
HM 352	Corporate Communication	3	0	0	3

Subjects offered to other Departments

CODE	SUBJECTS	L	T	P	CREDITS
Mechanical					
PR 221	Production Technology - I	3	0	0	3
PR 222	Production Technology - II	3	0	0	3
PR 232	Production Process Lab.	0	0	2	1
PR 331	Production Drawing and Cost Estimation	1	0	2	2
PR 471	Advanced Machining Processes	3	0	0	3
PR 472	Resource Management Techniques	3	0	0	3