### PG-Curriculum Structure of ME -Production and Industrial Engineering

#### Ist Semester

S.	Course	Course Name	L	T	P	Credits
No	Code					
1.	PRN 511	Program core-1	3	0	0	3
		(Design and Manufacture of Mechanical Assemblies)				
2.	PRN 512	Program core-II	3	0	0	3
		(Computer Aided Manufacturing)				
3.	MAN 503	Open core-1 Program Mathematics/ Mathematics	3	0	0	3
		(Advanced Mathematics)				
4.		Program Elective I	3	0	0	3
5.		Program Elective II	3	0	0	3
6.	IDN 510	Program Lab-I	0	0	3	2
		(Computer Aided Engineering Lab)				
				To	otal	17

# 2<sup>nd</sup> Semester

S.	Course	Course Name	L	T	P	Credits
No	Code					
1.	MAN 505	Open core-2	3	0	0	3
		(Design of Experiments and Research Methodology)				
2.	PRN 521	Program core-III	3	0	0	3
		(Production Management systems)				
3.	PRN 522	Program core-IV	3	0	0	3
		(Welding Engineering)				
4.		Program Elective III	3	0	0	3
5.		Open Elective*	3	0	0	3
6.	PRN 520	Program lab – II**	0	0	3	2
		(Advanced Manufacturing Lab)				
				To	otal	17

<sup>\*</sup> It could be intra/inter department ME course

#### 3<sup>rd</sup> Semester

S.	Course	Course Name	L	T	P	Credit
No.	Code					
1.		Program Elective IV	3	0	0	3
2.		Program Elective V	3	0	0	3
3.	PRN 531	Case Histories and Industry Experiences <sup>#</sup>	0	0	2	1
4.	PRN 532	Seminar and Technical Writing	0	0	2	1
5.	PRN 598	Project/Industry-based Project – I	0	0	24	12
					Total	20

<sup>#</sup> To include 4 to 5 invited lectures from industrial experts.

#### <u>OR</u>

### 3<sup>rd</sup> Semester

S.	Course	Course Name	L	T	P	Credit
No.	Code					
1.	PRN 531	Case Histories and Industry Experiences#	0	0	2	1
2.	PRN 532	Seminar and Technical Writing	0	0	2	1
3.	PRN 598	Project/Industry-based Project – I	0	0	24	12
					Total	14

<sup>#</sup> To include 4 to 5 invited lectures from industrial experts.

<sup>\*\*</sup> To include minimum of 2 industrial visits of half day duration to nearby industries.

 $<sup>4^{</sup>th}$  Semester

S.	Course	Course Name	L	T	P	Credit
No.	Code					
1.	PRN 599	Project/Industry-based Project – II	0	0	36	18
					Total	18

## List of Program Elective-I , II, III, IV or V (Any five)

Course Code	Course Name	LTP	Credits
PRN 551	Non Conventional Machining Processes	3-0-0	3
PRN 552	Machining Science	3-0-0	3
PRN 553	Metal Forming	3-0-0	3
PRN 554	Casting Technology	3-0-0	3
PRN 555	Finite Element Analysis	3-0-0	3
PRN 556	Advanced Machine Tool Design	3-0-0	3
IDN 522	Applied Ergonomics	3-0-0	3
PRN 557	Industrial Robotics	3-0-0	3
PRN 558	Flexible Manufacturing Systems	3-0-0	3
PRN 559	Maintenance and Reliability Engineering	3-0-0	3
PRN 560	Industrial automation	3-0-0	3
PRN 561	Non Destructive Testing	3-0-0	3
IDN 551	Materials, Manufacturing and Design	3-0-0	3
PRN 562	Plastics Engineering	3-0-0	3
PRN 563	Operation Management	3-0-0	3
	•	09/15	
	15-0-0	09/15	

**List of Open Elective (Any One)** 

Course Code	Course Name	LTP	Credits
PRN 571	Quality Management System	3-0-0	3
PRN 572	Value Engineering	3-0-0	3
	03		