

# PSN COLLEGE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution)

Approved by AICTE, Affiliated to ANNA University, Chennai and Recognized by UGC u/s

Melathediyoor, Palayamkottai (TK), Tirunelveli (DT), Pin: 627 152

An ISO 9001: 2008 Certified Institution



## DEPARTMENT OF MECHANICAL & AUTOMATION ENGINEERING

### B.E – MECHANICAL & AUTOMATION ENGINEERING (Regulation 2013 – Full Time)

## CURRICULUM

### III SEMESTER

S. No	Code No.	Paper	L	T	P	C	Periods
<b>THEORY</b>							
1	001001	Transformation Techniques	4	1	0	4	75
2	009001	Electrical Drives and Controls	3	0	0	3	45
3	009002	Thermal Science	3	1	0	3	60
4	009003	Mechanics of Solids	3	0	0	3	45
5	009004	Mechanics of Fluids & Fluid Machines	3	0	0	3	45
6	009005	Production Technology	3	0	0	3	45
<b>PRACTICAL</b>							
7	009101	Electrical Engineering Lab	0	0	3	2	45
8	009102	Mech. of Solids / Mech. of Fluid Lab	0	0	3	2	45
9	009103	Communication Skills Lab	0	0	3	2	45
		<b>TOTAL</b>	<b>19</b>	<b>2</b>	<b>9</b>	<b>25</b>	<b>450</b>

## IV SEMESTER

S. No	Code No.	Paper	L	T	P	C	Periods
<b>THEORY</b>							
1	009006	Numerical Methods	3	1	0	3	60
2	009007	Kinematics of Machinery	3	1	0	3	60
3	009008	Engineering Materials and Metallurgy	3	0	0	3	45
4	009009	Manufacturing Machines	3	1	0	3	60
5	009010	Electronics & Microprocessors	3	0	0	3	45
6	009011	LAN & Networking	3	0	0	3	45
<b>PRACTICAL</b>							
7	009104	Production Technology Lab	0	0	3	2	45
8	009105	Electronics and Microprocessors Lab	0	0	3	2	45
9	009106	LAN & Networking Lab	0	0	3	2	45
<b>TOTAL</b>			<b>18</b>	<b>3</b>	<b>9</b>	<b>24</b>	<b>450</b>

## CURRICULUM

## VI SEMESTER

S. No	Code No.	Paper	L	T	P	C	Periods
<b>THEORY</b>							
1		Dynamics of Machinery	3	1	0	3	60
2		Design of Transmission System	3	1	0	3	60
3		Computer Integrated Manufacturing	3	0	0	3	45
4		Manufacturing Automation	3	1	0	3	60
5		Fluid Power Transmission System	3	0	0	3	45
6		Elective – I	3	0	0	3	45
<b>PRACTICAL</b>							
7		Dynamics Lab	0	0	3	2	45
8		Computer Aided Design Lab	0	0	3	2	45
		Automation Laboratory	0	0	3	2	45
<b>TOTAL</b>			<b>18</b>	<b>3</b>	<b>9</b>	<b>24</b>	<b>450</b>

### VII SEMESTER

S. No	Code No.	Paper	L	T	P	C	Periods
<b>THEORY</b>							
1		Total Quality Management	3	0	0	3	45
2		Metal Cutting & Tool Design	3	1	0	3	60
3		Mechatronics	3	1	0	3	60
4		Finite Element Analysis	3	0	0	3	60
5		Elective – II	3	0	0	3	45
6		Elective - III	3	0	0	3	45
<b>PRACTICAL</b>							
7		Finite Element Analysis Lab	0	0	3	2	45
8		Mechatronics Lab	0	0	3	2	45
9		Design and Fabrication Project	0	0	3	2	45
<b>TOTAL</b>			<b>18</b>	<b>3</b>	<b>9</b>	<b>24</b>	<b>450</b>

### VIII SEMESTER

S. No	Code No.	Paper	L	T	P	C	Periods
<b>THEORY</b>							
1		Robotics	3	0	0	3	45
2		Elective – IV	3	0	0	3	45
3		Elective – V	3	0	0	3	45
<b>PRACTICAL</b>							
4		Project Work	0	0	12	10	45
<b>TOTAL</b>			<b>9</b>	<b>0</b>	<b>12</b>	<b>19</b>	<b>315</b>

## ELECTIVES

S. No	Code No.	Paper	L	T	P	C	Periods
<b>SIXTH SEMESTER</b> (Elective – I)							
1		Nontraditional Machining Process	3	0	0	3	45
2		Marketing Management	3	0	0	3	45
3		Refrigeration & Air – Conditioning	3	0	0	3	45
4		Vibration and Noise Control	3	0	0	3	45
5		Renewable Sources of Energy	3	0	0	3	45
6		Quality control & Reliability Engineering	3	0	0	3	45
<b>SEVENTH SEMESTER</b> (Elective – II & III)							
1		Process Planning & Cost Estimation	3	0	0	3	45
2		Design of Jigs, Fixtures & Press Tools	3	0	0	3	45
3		Nuclear Engineering	3	0	0	3	45
4		Computational Fluid Dynamics	3	0	0	3	45
5		Thermal Turbo Machines	3	0	0	3	45
6		Composite Materials	3	0	0	3	45
<b>EIGHT SEMESTER</b> (Elective – IV & V)							
1		Production Planning and Control	3	0	0	3	45
2		Modern concepts of Engineering Design	3	0	0	3	45
3		Advanced Strength of Materials	3	0	0	3	45
4		Product Design and Costing	3	0	0	3	45
5		Maintenance Engineering	3	0	0	3	45
6		Entrepreneurship Development	3	0	0	3	45