



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for F.Y. M.Tech. (Mechanical Production Engineering) Sem-I from AY 2020-21

Sr.No.	Category	Course Code	Course Name	L	T	P	Hrs	Credits	ISE-1	MSE*	ISE-2	ESE
Professional Core (Theory)												
1	HS	4IC501	Research Methodology	2	0	0	2	2	10	30	10	50
2	PC	4PR501	Manufacturing processes	3	0	0	3	3	10	30	10	50
3	PC	4PR502	Advanced Joining Technology	3	0	0	3	3	10	30	10	50
Professional Core (Lab)												
4	PC	4PR551	Production Engineering Laboratory 1	0	0	4	4	2	25	25	25	25
Professional Elective (Theory)												
5	PE	Refer list	Professional Elective 1	3	0	0	3	3	10	30	10	50
6	PE	Refer list	Professional Elective 2	3	0	0	3	3	10	30	10	50
Professional Elective (Lab)												
7	PE	4PR552	Production Engineering Laboratory 2	0	0	4	4	2	25	25	25	25
Mandatory Life Skill Courses												
8	MC	Refer list	Mandatory Life Skill Course	2	0	0	2	0	10	30	10	50
Value Added Professional Courses #												
9	VAPC	Refer list	Value Added Professional Courses					#				
Value Added Life-Skill Courses #												
10	VALS	Refer list	Value Added Life Skill Courses					#				
Total				16	0	8	24	18				

Notes:

* For Lab courses, there will be only internal continuous assessment. ESE is a separate head of passing for both theory and lab courses.

The Value Added Courses are Optional Courses. The mode of teaching (LTPI) & evaluation scheme is decided by the resource person.

The list of Value added courses will be updated from time to time.

The course may be on paid basis. The credits earned from these courses will be shown on grade card.

For SPI and CPI calculation, these courses will be excluded.

@ Minimum 2 mandatory life skill courses are to be completed for award of degree.

For further details refer to Academic and Examination rules and regulations.



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Sr.No.	Course Code	Course Name
Professional Elective 1		
1	4PR511	Finite Element method in Manufacturing
2	4PR512	Industrial Hydraulics and Pneumatics
3	4PR513	Quality Engineering for Manufacturing
4	4PR514	Manufacturing of nonmetallic products
Professional Elective 2		
1	4PR515	Project Management
2	4PR516	Design for Manufacturing and Assembly
3	4PR517	Precision Engineering
4	4PR518	Costing and Cost control



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Sr.No.	Category	Course Code	Course Name	L	T	P	Hrs	Credits	ISE-1	MSE*	ISE-2	ESE
Professional Core (Theory)												
1	PC	4PR521	Advanced Manufacturing Processes	3	0	0	3	3	10	30	10	50
2	PC	4PR522	Industrial Automation and Mechatronics	3	0	0	3	3	10	30	10	50
Professional Core (Lab)												
3	PC	4PR571	Production Engineering Laboratory 3	0	0	4	4	2	25	25	25	25
4	PC	4PR572	Industrial Project	0	0	4	4	2	25	25	25	25
Professional Elective (Theory)												
5	PE	Refer list	Professional Elective 3	3	0	0	3	3	10	30	10	50
6	PE	Refer list	Professional Elective 4	3	0	0	3	3	10	30	10	50
Professional Elective (Lab)												
7	PE	4PR573	Production Engineering Laboratory 4	0	0	4	4	2	25	25	25	25
Mandatory Life Skill Courses												
8	MC	Refer list	Mandatory Life Skill Course	2	0	0	2	0	10	30	10	50
Value Added Professional Courses #												
9	VAPC	Refer list	Value Added Professional Courses					#				
Value Added Life-Skill Courses #												
10	VALS	Refer list	Value Added Life Skill Courses					#				
Total				14	0	12	26	18				

Notes:

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Sr.No.	Course Code	Course Name
Professional Elective 3		
1	4PR531	CAD / CAM / CNC
2	4PR532	Additive Manufacturing
3	4PR533	Micro-Electro-Mechanical Systems
4	4PR534	Modeling and simulation in manufacturing
Professional Elective 4		
1	4PR535	Product Lifecycle Management
2	4PR536	Processing of Plastics and Composites
3	4PR537	Advanced Tool Design
4	4PR538	Optimization and Quantitative Techniques