# Punyashlok Ahilyadevi Holkar Solapur University, Solapur Faculty of Science & Technology

Credit System MODIFIED structure of T.Y. B. Tech. Mechanical Engineering W.E.F. 2020-21

Semester -V

**Theory Courses** 

Course	Name of Theory Course		Hrs.	/week		Credits	Examination Scheme				
code		L	T	P	D		ISE	ESE	ICA	Total	
ME311	Machine Design –I	3	-	-	-	3	30	70	-	100	
ME312	CAD-CAM & CAE	3				3	30	70		100	
ME313	Metallurgy	3	-		-	3	30	70	-	100	
ME314	Industrial Engineering and Operation Research	3	-	-		3	30	70	-	100	
ME315	Professional Elective –III	3	-	-		3	30	70	-	100	
ME316	Advanced Programming Concepts	1	-			1	-	-	-	-	
SLH 31	Self Learning: HSS					2#		50		50	
	Sub Total	16	-	-	-	16	150	400	-	550	

**Semester 5** Laboratory / Tutorial Courses

Course code	Name of Laboratory /Tutorial Course	1 y	Hrs./	week	20.	Credits	Examination Scheme					
		L T P	T	D	D		ISE	ESE		ICA	Total	
			ע		ISE	POE	OE					
ME311	Machine Design –I			2		1	-	-	1	25	25	
ME312	CAD-CAM & CAE	-	-	2	-	1		25	-	25	50	
ME313	Metallurgy	-	_	2	_	1	-	-	25	25	50	
ME314	Industrial Engineering and Operation	-		2	5.1	1	-	-	-	25	25	
	Research											
ME315	Professional Elective –III	Fee	राध	2	4517	- 1 _	7.	-	ı	25	25	
ME316	Advanced Programming Concepts			2		101 (	-	-	-	50	50	
ME317	Mechanical Workshop –II	- I	-	2	-	1	77 -	-	-	25	25	
	Sub Total	-	-	14	-	07	-	5	0	200	250	
	Grand Total	16	-	14	-	23	150	45	50	200	800	

Abbreviations: L-Lectures, T-Tutorials, P-Practicals, D-Drawing, ISE- In-Semester Exam, ESE- End Semester Exam, ICA- Internal Continuous Assessment

**Professional Elective –III:** A. Gas turbines **B.** Industrial Hydraulics and Pneumatics **C.** Non Conventional Machining D. Tool Engineering # indicates credits over and above.

## Punyashlok Ahilyadevi Holkar Solapur University, Solapur

## **Faculty of Science & Technology**

Credit System MODIFIED structure of T.Y. B. Tech. Mechanical Engineering W.E.F. 2020-21

**Semester -VI** 

#### **Theory Courses**

Course	Name of Theory Course		Hrs./week				Examination Scheme				
code	Name of Theory Course	L	T	P	D	Credits	ISE	ESE	ICA	Total	
ME321	Machine Design –II	3		1	ı	3	30	70	-	100	
ME322	Instrumentation & Control	3	ł	-	-	3	30	70	-	100	
ME323	Heat Transfer	3	A		-	3	30	70	-	100	
ME324	Industrial & Quality Management	3			-	3	30	70	-	100	
ME325	Professional Elective –IV	3	-	- ]	-	3	30	70	-	100	
ME326	Mini Project	-	1	1	-	_	-	-	-	ı	
ME327	Metrology		-	ı	-		1	-	-	ī	
SLH 32	Self-Learning Technical	-	-	-	-	2#	-	50	-	50	
	Sub Total	15	-	-	-	15	150	400	-	550	

**Semester 6 Laboratory / Tutorial Courses** 

Course code	Name of Laboratory / Tutorial Course		Hr	s./weel	k	Credits	Examination Scheme				
		7	T	P	D		ISE	ESE		ICA	Total
Coue		L	1	P	ע			POE	OE		
ME321	Machine Design –II	_	-	2	-	1	-	-		25	25
ME322	Instrumentation & Control	1	-	2	1	1	-	-		25	25
ME323	Heat Transfer	-	-	2	-	1	-	25	-	25	50
ME324	Industrial & Quality Management	1111	1	177	1.00	1	-	-	-	25	25
ME325	Professional Elective –IV	4.63.5	5.1.5	2	111		0 -	-	-	25	25
ME326	Mini Project	-	1	-	-	1	ğ -	-	-	25	25
ME327	Metrology			2		1			25	25	50
ME328	Mechanical Workshop –III	-	-	2	-	1				25	25
	Sub Total	-	02	12	-	08	-	5	0	200	250
	Grand Total	15	02	12	-	23	150	45	50	200	800

Abbreviations: L-Lectures, T-Tutorials, P-Practical, D-Drawing, ISE- In-Semester Exam, ESE- End Semester Exam, ICA- Internal Continuous Assessment, Professional Elective –IV: A. Project Management B. Industrial Product Design C. Plastic Engineering D. Mechanical Vibrations E. Railway Transportation. #indicates credits over and above

- Note –
- **1.** Batch size for the practical /tutorial shall be of 15 students. On forming the batches, if the strength of remaining student exceeds 9, then a new batch shall be formed.
- 2. Industrial Training (evaluated at B. Tech Sem.-VII) of minimum 15 days shall be completed in any vacation after B.Tech Sem.-III, but before B. Tech. Sem.-VII & the report shall be submitted and evaluated in B.Tech. Sem.-VII
- 3. Students shall select one Self Learning Module at B.Tech. Sem-V and B.Tech. Sem. VI each from Humanities and Social Sciences and Technical Groups Respectively.
- **4.** Curriculum for Humanities and Social Sciences Self Learning Modules is common for all under graduate programmes of faculty of Engineering and Technology.

#### 6. Self-Learning Subjects:

A. Semester-V (HSS): Student can select a Self Learning Course from Solapur University, Solapur HSS Course List and appear for its examination as and when conducted by Solapur University, Solapur.

OR

Student can enroll for National Programme on Technology Enhanced Learning (NPTEL) course, complete its assignments and Appear for certificate examination as and when conducted by NPTEL.

For more details about Self Learning Course (HSS) please refer to separate rule document available from Solapur University, Solapur. More details about NPTEL are available at http://nptel.ac.in

- B. Semester-VI (Technical): Students can select any one of the following self-learning technical subjects;
  - a. Manufacturing of Composites
  - **b.** Design Practices
  - c. Joining Technology for Metals
  - d. Steam Power Engineering
- 7. ICA assessment shall be a continuous process based on student's performance in class tests, assignments, homework, subject Seminars, quizzes, laboratory books and their interaction..