

Curriculum (Structure)

for

S.Y.B.TECH
Mechanical Engineering Programme
(Under Graduate Programme)
From Academic Year 2018-2019

Teaching and Evaluation scheme for

Second Year B. Tech. Programme in Mechanical Engineering Semester – III

		т	eaching	g Schot	ma	Evalu	ation Sc	heme	
Course Code	Course Name	•		Week)	ine	Component		Marks	}
Code	Name	L	Т	P	С	Component	Max		lin ssing
	Engineering Mathematics- III	3	1	-	4	ISE- I	10		
UMCH0301						MSE	30		40
UMCHUSUI						ISE-II	10		40
						ESE	50	20	
	Engineering	3	-	-	3	ISE- I	10		
UMCH0302	Thermodynamics					MSE	30		40
						ISE-II	10		40
						ESE	50	20	
	Fluid Mechanics	3	-	-	3	ISE- I	10		
UMCH0303						MSE	30		40
						ISE-II	10		40
						ESE	50	20	
		3	-	-	3	ISE- I	10		
UMCH0304	Manufacturing Processes					MSE	30		40
						ISE-II	10		40
						ESE	50	20	
	Machine Drawing and	3	1	-	4	ISE- I	10		
UMCH0305	Computer Aided Drafting					MSE	30		40
						ISE-II	10		40
						ESE	50	20	
UMCH361	Electrical Technology (Audit Course)	2	-	-	0	ESE	100		40
UMCH0330	Object oriented Programming Lab	-		2	1	ISE	25	10	
UMCH0331	Machine Drawing Lab	-		2	1	ISE	25	10	
						ESE(POE)	25	10	
UMCH0332	Thermal Engineering Lab	-		2	1	ISE	25	10	
						ESE(OE)	25	10	1
UMCH0333	Fluid Mechanics Lab	-	-	2	1	ISE	25	10	
						ESE(POE)	25	10	1
UMCH0334	Workshop Practice II	-	-	2	1	ISE	25	10	
	Total	17	2	10	22	_			1
		Cont	act Hou	ırs/We <mark>9 Hrs</mark>	ek:	To	Total: 800		

Note: ESE: End Semester Examination, MSE: Mid Semester Examination, ISE: In Semester Evaluation.

Teaching and Evaluation scheme for

Second Year B.Tech. Programme in Mechanical Engineering - Semester IV

		Teaching Scheme				Evaluat	ion Sch	eme			
Course	Course Name			/Week				N	Iarks		
Code	Course Nume	L	Т	P	С		Component	Max		Min for Passing	
							ISE- I	10			
UMCH0401	Analysis of Mechanical	3	1		4		MSE	30		40	
	Elements	3	1	-	4	-	ISE-II	10		40	
							ESE	50	20		
							ISE- I	10			
UMCH0402	Mashina Taala	2	1		4		MSE	30		40	
	Machine Tools	3	1	-	4		ISE-II	10		40	
							ESE	50	20		
							ISE- I	10			
UMCH0403	Kinematics of Machines	3		-	2		MSE	30		40	
		3	-		3		ISE-II	10		40	
							ESE	50	20		
							ISE- I	10			
UMCH0404	Though a Marchine	2			2		MSE	30		40	
	Turbo Machines	3	-	_	3		ISE-II	10		40	
							ESE	50	20		
							ISE- I	10			
UMCH0405	Metallurgy	2			3		MSE	30		40	
		3	-	-	3		ISE-II	10		40	
							ESE	50	20		
UMCH461	Environmental Studies (Audit Course)	2	-	-	0		ESE	100		40	
UMCH0431	Wallschan Drastias III			2	1		ISE	25	10		
	Workshop Practice III	-	-	2	1		ESE (POE)	25	10		
UMCH0432	Kinematics of Machines Lab	-	-	2	1		ISE	25	10		
UMCH0433	Turbo Machines Lab	-	-	2	1		ISE	25	10		
UMCH0434	Community Community I			2	1		ISE	25	10		
	Computer Graphics Lab	_	_	2	1		ESE(POE)	25	10		
UMCH0435	Metallurgy Lab			2	1		ISE	25	10		
	ivicianuigy Lab	-	-		1		ESE(OE)	25	10		
		17	2	10	22						
	Total	Con	tact H	lours/V	Veek:		To	tal: 800			
			29) Hrs				.ai. 000			

Note: ESE: End Semester Examination, MSE: Mid Semester Examination, ISE: In Semester Evaluation.



Curriculum (Structure)

for

T.Y.B.TECH
Mechanical Engineering Programme
(Under Graduate Programme)
From Academic Year 2019-2020

Teaching and Evaluation scheme for

Third Year B.Tech. Programme in Mechanical Engineering - Semester V

		Teaching Scheme		homo	Evaluation Scheme				
Course Code	Course Name			/Wee		Commonant		Mar	ks
Code		L	T	P	C	Component	Max		lin For assing
UMCH0501	Metrology and	3	-	-	3	ISE- I	10		
	Quality Control					MSE	30		40
						ISE-II	10		40
						ESE	50	20	
UMCH0502	Heat Transfer	3	-	-	3	ISE- I	10		
						MSE	30		40
						ISE-II	10		40
						ESE	50	20	1
UMCH0503	Dynamics of	3		-	3	ISE- I	10		
	Machines					MSE	30		40
						ISE-II	10		40
						ESE	50	20	1
UMCH0504	Design of	3	1	-	4	ISE- I	10		
	Machine					MSE	30		40
	Elements					ISE-II	10		40
						ESE	50	20	1
UMCH0505	Manufacturing	3	1	-	4	ISE- I	10		
	Engineering					MSE	30		40
						ISE-II	10		40
						ESE	50	20	1
UMCH0561	Control Engineering (Audit Course)	3	-	-	0	ESE	100		40
UMCH0531	CAD/CAM Lab		-	2	1	ISE	25	10	
						ESE(POE)	25	10	
UMCH0532	Measurement Lab	-	-	2	1	ISE	25	10	
UMCH0533	Heat Transfer	-	-	2	1	ISE	25	10	
	Lab					ESE(POE)	25	10	
UMCH0534	Dynamics of	-	-	2	1	ISE	25	10	
	Machines Lab.					ESE(OE)	25	10	
UMCH0541	Metrology and Quality Control Lab.	-	-	2	1	ISE	25	10	
	Total	18	2	10	22	TO 4	1 . 000		
		Con		Hours/ Hrs	Week:	Total: 800			

Note: ESE: End Semester Examination, MSE: Mid Semester Examination, ISE: In Semester Evaluation

Teaching and Evaluation scheme for



Third Year B.Tech. Programme in Mechanical Engineering - Semester VI

		Te	achin	g Scl	heme		Evalu	uation S	Schen	1e
Code	Course Name		(Hrs/	Wee.	k)				Mai	rks
Code	Course wante	L	Т	P	C	Compo	nent	Max	N	Ain For
			1	1				IVIAX	I	Passing
		3	-	-	3	ISE- I		10		
	Machine Design					MSE		30		40
UMCH0601						ISE-II		10		40
						ESE		50	20	
	Industrial	3	-	-	3	ISE- I		10		
	Hydraulics and					MSE		30		40
UMCH0602	Pneumatics					ISE-II		10		40
						ESE		50	20	
	Internal	3	-	-	3	ISE- I		10		
	Combustion					MSE		30		40
UMCH0603	Engines					ISE-II		10		40
						ESE		50	20	
	Professional	3	1	-	4	ISE- I		10		
UMCH0621*	Elective – I					MSE		30		40
						ISE-II		10		40
						ESE		50	20	
	Open Elective- I	3		-	3	ISE- I		10		
UOEL0671#						MSE		30		
						ISE-II		10		
						ESE		50	20	40
ID (CII) Col	Process	2	-	-	0	ESE		100		40
UMCH661	Engineering (Audit									
*** **** ***	Course)	-		2	1	ISE		50	20	
UMCH0631	Workshop Practice IV	-	-	2	1		T \			
						ESE(PO	E)	25	10	
UMCH0632	Industrial			2	1	ISE		25	10	
	Hydraulics and									
LIM CHO COA	Pneumatics Lab	-		2	1	ISE		25	10	
UMCH0634	I C Engines Lab	-	-	2	1		E)	25	10	
LIMOHO 625	Machina Dagian			2	1	ESE(PO ISE	E)	25	10	
UMCH0635	Machine Design Lab	-	-	~	1		'\			
III ACITO CAS		1		1		ESE(OE	·)	25	10	
UMCH0641	Industrial Training and Mini Project	-		4	2	ISE		50	20	
	Total	17	1	12	22			<u> </u>	1	1
					Veek:		Tot	tal : 85()	
				Hrs			_ 0			
	1	1								

Note: ESE: End Semester Examination, MSE: Mid Semester Examination, ISE: In Semester Evaluation

	Professional Elective I*						
Course Code	Course Name						
UMCH0621	Safety and Maintenance Engineering						
UMCH0622	Computational Fluid Dynamics						
UMCH0623	Operations Management						
UMCH0624	Industrial Product Design						
UMCH0625	Industrial Automation and Robotics						
UMCH0626	Applied Numerical Methods						
UMCH0627	Advanced Automobile Design						

Open Elective I #						
Course Code Course Name						
UOEL0671	Energy Conservation and Management					
UOEL0672	Biomedical Engineering					



Curriculum (Structure)

for

FINAL YEAR B.TECH
Mechanical Engineering Programme
(Under Graduate Programme)
From Academic Year 2020-2021

Teaching and Evaluation scheme for

Final Year B.Tech. Programme in Mechanical Engineering - Semester VII

	Teaching Scheme					Evaluation Scheme				
Code	Course Name		(Hrs	/Weel	k)				Mar	ks
Code	Course Ivame	L	T	P	C		Component	Max		Iin For Passing
	Industrial	3	-	-	3		ISE- I	10		
UMCH0701	Engineering						MSE	30		40
							ISE-II	10		40
							ESE	50	20	
	Mechatronics	3	-	-	3		ISE- I	10		
UMCH0702							MSE	30		40
							ISE-II	10		40
							ESE	50	20	
	Refrigeration	3	-	-	3	1 [ISE- I	10		
LIMOLIO702	and Air						MSE	30		40
UMCH0703	Conditioning						ISE-II	10		40
							ESE	50	20	
	Professional	3	-	-	3	1	ISE- I	10		
UMCH0721**	Elective II						MSE	30		40
						1	ISE-II	10		40
							ESE	50	20	-
	Open Elective II	3	_	_	3	1	ISE- I	10		
UOEL0771##	open zacen ve za						MSE	30		
COLLOTTIN							ISE-II	10		40
							ESE	50	20	-
UMCH761	Industrial Management and Operations Research (Audit Course)	3	-	-	0		ESE	100		40
UMCH0731	Refrigeration and Air Conditioning Lab	-	-	2	1		ISE	25	10	
UMCH0732	Mechatronics	-	-	2	1] [ISE	25	10	
	Lab						ESE(POE)	25	10	
UMCH0733	Industrial Engineering Lab			2	1		ISE	25	10	
UMCH0734	Professional	_	-	2	1	1	ISE	25	10	
01.10110701	Elective II- Lab						ESE(OE)	25	10	
UMCH0751	Project-I and	_	-	2	1	1	ISE	50	20	
0141010131	Seminar			_	1		ESE(OE)	25	10	1
	Total	18	0	10	20	1			1 10	<u> </u>
	1000	Contact Hours/Week				1	To	tal: 825		
				Hrs						

Note: ESE: End Semester Examination, MSE: Mid Semester Examination, ISE: In Semester Evaluation

	Professional Elective II**							
Course Code	Course Name							
UMCH0721	Finite Element Analysis							
UMCH0722	Noise and Vibrations							
UMCH0723	Automobile Engineering							
UMCH0724	Advanced Foundry Technology							
UMCH0725	Advanced Manufacturing Processes							

Open Elective II ##							
Course Code Course Name							
UOEL0771	Product Lifecycle Management						
UOEL0772	Enterprise Resource Planning						

	Professional Elective II-Lab						
Course Code	Course Name						
UMCH0734	Finite Element Analysis Lab						
UMCH0735	Noise and Vibrations Lab						
UMCH0736	Automobile Engineering Lab						
UMCH0737	Advanced Foundry Technology Lab						
UMCH0738	Advanced Manufacturing Processes Lab						

Kolhapur Institute of Technology's College of Engineering, Kolhapur Teaching and Evaluation scheme for

Final Year B.Tech. Programme in Mechanical Engineering - Semester VIII

		Т	aahina	Caba		Evalı	iation S	cheme	
Code	Code Course Name		eaching (Hrs/V			Cahama	Marks		
		L	Т	P	С	Scheme	Max	Min l Passi	
						ISE- I	10		
III ACH 10001	Energy and Power	3			3	ISE-II	10		40
UMCH0801	Engineering	3	-	_	3	MSE	30		40
						ESE	50	20	
						ISE- I	10		
*** *G****	Professional Elective III	3			3	ISE-II	10		40
UMCH0802		3	-	-	3	MSE	30		40
						ESE	50	20	
	Duning Dhana H/ Lutamatin	-	-	12	6	ISE I	75	30	
UMCH0851	Project Phase II/ Internship					ISE II	75	30	
						ESE(OE)	150	60	
	Online Certificate Course - I								
	Online Certificate Course - II								
	Total	6	-	12	12				
		Con	tact Ho	urs/W	eek:	Total : 500			
			18 I	Hrs					

Note: **ESE:** End Semester Examination, **MSE:** Mid Semester Examination, **ISE:** In Semester Evaluation

Online Certificate Course based on Edx Coursera, Mooc will be offered as per suggestion by guide

	Professional Elective III***						
Course Code	Course Name						
UMCH0802	Design of Mechanical Systems						
UMCH0803	Costing and Finance Management						
UMCH0804	Marketing Management						
UMCH0805	Total Quality Management						
UMCH0806	Cryogenics						
UMCH0807	Design of Thermal Systems						
UMCH0808	Industry 4.0						