CVM University

Programme: M.Tech. in Renewable Energy

Semester : I Course Structure



	Course Code	Course Title	Per Week			Credits	Exam Duration in Hours		Component of Marks					
Course					Theory				Practical		T 4 1/			
			L	Т	P		Theory	Pract.	External / Passing	Internal / Passing	Internal / Passing	External / Passing	Total/ Passing	
Core I	102450101	Advanced Thermodynamics and Heat transfer	3	0	2	4	2	2	60/24	40/16	20/08	30/12	150/60	
Core II	102450102	Solar energy	3	0	2	4	2	2	60/24	40/16	20/08	30/12	150/60	
MLC*	102300111	Research Methodology and IPR	2	0	0	2	NA	NA	0/0	0/0	40/16	60/24	100/40	
D	102450104	Distributed Generation and Microgrids		0		4	2	2	60/24	40/16	20/08	30/12	150/60	
Program Elective I	102440104	Hydrogen Energy and Fuel Cell	3		2									
(Any One)	102440105	Waste Management and Energy Recovery		O	2									
Program Elective II	102450106	Energy Forecasting, Modeling and Project Management	3	0	2	4	2	2	60/24	40/16	20/08	30/12	150/60	
(Any One)	102450107	Materials For Solar Devices				4	2	2						
(Any One)	102450108	Optimization Techniques						Ì						
	102301201	Constitution of India								0/0	0/0	0/0	50/20	
	102301202	Disaster Management	_ _ _											
	102301203	English for Research Paper Writing												
	102301204	Essential soft skills and Human Values												
Audit 1	102301205	Pedagogy Studies	2	0	0	0	2	NA	50/20					
(Any One)	102301206	Personality Development through Life Enlightenment Skills		O	O	O .			30/20					
	102301207	Sanskrit for Technical Knowledge												
	102301208	Stress Management by Yoga												
	102301209	Value Education												
			16	0	8	18	10	8						

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Programme: M.Tech. in Renewable Energy

> Semester :II Course Structure



	Course Code	Course Title	Per Week			Exam Duration in Hours		Component of Marks					
Course					Credits			Theory		Practical		Total/	
			L	Т	P		Theory	Pract.	External / Passing	Internal / Passing	Internal / Passing	External / Passing	Passing
Core III	102450201	Biofuel & Bio-energy systems	3	0	2	4	2	2	60/24	40/16	20/08	30/12	150/60
Core IV	102450202	Solar photovoltaic power plants: Planning, Design and Balance of systems	3	0	2	4	2	2	60/24	40/16	20/08	30/12	150/60
Core V	102450203	Wind Energy Systems	3	0	2	4	2	2	60/24	40/16	20/08	30/12	150/60
Program	102440209	Design of Heat Exchangers	3			4		2	60/24	40/16	20/08	30/12	150/60
Elective III	102450204	Green Buildings		0	2		2						
(Any One)	102440207	Thermal System Design											
Program	102330206	Computational Fluid Dynamics	3					2	60/24	40/16	20/08	30/12	150/60
Elective IV	102450207	Instrumentation For Energy Systems		0	2	4	2						
(Any One)	102450208	Ocean Energy and Tidal Energy											
Core	102300112	Seminar	0	0	4	2	NA	NA	0/0	0/0	100/40	0/0	100/40
	102301201	Constitution of India						 NA 	50/20	0/0	0/0	0/0	50/20
<u> </u>	102301202	Disaster Management				 0							
<u>_</u>	102301203	English for Research Paper Writing											
#Audit 2	102301204	Essential soft skills and Human Values											
(Any One)	102301205	Pedagogy Studies	2	0	0		2						
(my one)	102301206	Personality Development through Life Enlightenment Skills											
] 	102301207	Sanskrit for Technical Knowledge	j J										
	102301208	Stress Management by Yoga											
	102301209	Value Education		Ì									
			17	0	14	22	12	10					

[#] Course opted in Audit 1 will not be offered in Audit 2.

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Programme: M.Tech. in Renewable Energy

Semester : III Course Structure



Course		Course Title	Per Week			Exam Duration in Hours		Component of Marks					
	Course Code				Credits			Theory		Practical		T-4-1/	
			L	T	P		Theory	Pract.	External / Passing	Internal / Passing	Internal / Passing	External / Passing	Total/ Passing
Program Elective I (Any One)	102450301	Advances in Biomass Gasification	3	0	2	4	2	2	60/24	40/16	20/08	30/12	150/60
	102450302	Energy Economics, Policy and Regulation Act							00/21	10/10	20/00	00/12	100/00
Open Elective II (Any One)	102300311	Business Management	3	2	0	4	2	2	(0/24	40/17	20/09	20/12	150/60
II (Ally Olle)	102330312	Industrial Safety							60/24	40/16	20/08	30/12	150/60
	102330311	Composite Material											
Dissertation	102300301	Dissertation Phase –I	0	16	0	8	0	2	NA	NA	20/8	80/32	100/40
			6	18	2	16							

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Programme:

M.Tech. in Renewable Energy

Semester :IV Course Structure



Course	Course Code	Course Title	Per Week			Exam Duration in Hours		Component of Marks					
					Credits			Theory		Practical		Total/	
			L	Т	P		Theory	Pract.	External / Passing	Internal / Passing	Internal / Passing	External / Passing	Passing Passing
Dissertation Phase-II	102300401	Dissertation Phase-II	0	32	0	16	2	2	NA	NA	40/16	160/64	200/80
			0	32	0	16							