

GITAM UNIVERSITY

(Declared as Deemed to be University U/S 3 of UGC Act, 1956)



Scheme of Instruction
of
M.Tech.(Machine Design & Farm Machinery)
(w.e.f 2008 -09 admitted batch)

Gandhi Nagar Campus, Rushikonda
VISAKHAPATNAM - 530 045
Website: www.gitam.edu

M.Tech. (Machine Design and Farm Machinery)
Programme Code: EPRMF 200800
FIRST SEMESTER

Course Code	Name of the Course	Periods per week			Duration of exam (hours)	Max. marks			Credits
		Lec.	Lab	Total		S	C	Total	
EPRMF 101	THEORY OF ELASTICITY AND PLASTICITY	4	—	4	3	60	40	100	4
EPRMF 102	TRACTOR SYSTEMS DESIGN - I	4	-	4	3	60	40	100	4
EPRMF 103	MECHANICS OF MACHINERY	4	—	4	3	60	40	100	4
EPRMF 104	ADVANCED OPTIMIZATION TECHNIQUES	4	—	4	3	60	40	100	4
EPRMF 105	INTEGRATED COMPUTER AIDED DESIGN	4	—	4	3	60	40	100	4
EPRMF 121-124	ELECTIVE - I	4	—	4	3	60	40	100	4

Practical / Drawing

EPRMF 111	CAD Lab	—	3	3	3	--	100	100	2
EPRMF 112	SEMINAR	—	3	3	3	---	100	100	2
Total		24	6	30	—	360	440	800	28

Elective-I: EPRMF121 Composite Materials EPRMF122. Robotics
EPRMF123 Theory of Plates and Shells EPRMF124. Concurrent Engineering

M.Tech. (Machine Design and Farm Machinery)
SECOND SEMESTER

Course Code	Name of the Course	Periods per week			Duration of exam (hours)	Max. marks			Credits
		Lec	Lab	Total		S	C	Total	
EPRMF 201	MECHANICAL VIBRATIONS	4	—	4	3	60	40	100	4
EPRMF 202	TRACTOR SYSTEMS DESIGN - II	4		4	3	60	40	100	4
EPRMF 203	INSTRUMENTATION & EXPERIMENTAL STRESS ANALYSIS	4	—	4	3	60	40	100	4
EPRMF 204	ADVANCED FINITE ELEMENT ANALYSIS	4	—	4	3	60	40	100	4
EPRMF 205	FARM MACHINERY DESIGN AND TESTING	4		4	3	60	40	100	4
EPRMF 231-234	Elective – II	4	—	4	3	60	40	100	4
Practical / Drawing									
EPRMF 211	CAE Lab	—	3	3	3	--	100	100	2
EPRMF 212	Farm Machinery Simulation Lab	—	3	3	3	--	100	100	2
Total		24	6	30	—	360	440	800	28

Elective–II : EPRMF231. Vehicle Dynamics EPRMF232 Mechatronics
EPRMF233 Computational Fluid Dynamics EPRMF234 Tribology

M.Tech. (Machine Design and Farm Machinery)
THIRD SEMESTER

Course Code	Name of the Course	Periods per week			Duration of exam (hours)	Max. marks			Credits
		Lec	Lab	Total		S	C	Total	
EPRMF 311	Comprehensive Viva-Voce	Whole Semester			-----	100	--	100	2
EPRMF 312	Project	Whole Semester			-----	50	50	100	6
Total						150	50	200	8

FOURTH SEMESTER

Course Code	Name of the Course	Periods per week			Duration of exam (hours)	Max. marks			Credits
		Lec	Lab	Total		S	C	Total	
EPRMF 411	Project	Whole Semester			-----	50	50	100	16

Total Credits: 80