

PROGRAMME : MASTER OF SCIENCE (MECHATRONICS ENGINEERING) (MSMCT)
TYPE : FULL TIME & PART TIME
SUMMARY

TYPE OF COURSES	CREDIT HOURS		
	PROGRAM STRUCTURE (MODE)		
	COURSEWORK ONLY (W)	COURSEWORK AND RESEARCH (C)	RESEARCH ONLY (T)
A. Core Course	9 Credits Hours	9 Credits Hours	0 credit
B. Elective by Specialization	15 Credits Hours	6 Credits Hours	N/A
C. University Required Course	6 Credits Hours	6 Credits Hours	0 Credit Hour
D. Research Courses	12 Credits Hours	21credit hours	42Credit hours
TOTAL	42 Credits Hours	42 credit hours	42 credit hours

A. CORE COURSES

No.	Course Code	Course Title	Credit Hours	Pre-Requisite
1	MCTE 7102	Mechatronics System Design	3	
2	MCTE 7222	System Dynamics and Control	3	
3.	MCTE 7212	Advanced Instrumentation and Measurement	3	

B. ELECTIVE BY SPECIALIZATION

Select 2 courses for Mixed Mode, Select 5 courses by Course Mode

No.	Course Code	Course Title	Credit Hours	Pre-Requisite
Instrumentation and Control				
1	MCTE 7101	Modeling and Simulation	3	
2	MCTE 7104	Advanced Control System	3	
3	MCTE 7108	Intelligent Machines	3	
4	MCTE 7110	Digital Control System Design	3	
5	MCTE 7211	Industrial Sensing Systems	3	
6	MCTE 7213	Advanced Digital Signal Processing	3	
7	MCTE 7214	Nonlinear and Adaptive Control	3	
8	MCTE 7555	Advanced Topics in Mechatronics *	3	
Robotics and Automation				
1	MCTE 7103	Microprocessors in Mechanical Systems	3	
2	MCTE 7107	Mechanical Vibration	3	

3	MCTE 7109	Advanced Topics in Robotics	3	
4	MCTE 7210	Power Electronics Systems and Design	3	
5	MCTE 7106	Machine Vision	3	
6	MCTE 7112	Active Control of Vibration	3	
7	MCTE 7311	Autonomous Agent Systems	3	
8	MCTE 7555	Advanced Topics in Mechatronics *	3	

C. UNIVERSITI REQUIRED COURSE

No.	Course Code	Course Title	Credit Hours	Pre-requisite
1	RKGS 7000	Values, Technology and Society (For W &C)	3	
2	RKGS 7001	Values, Technology and Society (For T)	0	
3	MCTE 7950	Research Methodology and Seminar (For W &C)	3	
4	MCTE 7951	Research Methodology and Seminar (For T)	0	

D. RESEARCH COURSES

No.	Course Code	Course Title	Credit Hours	Pre-requisite
Coursework and Research (21 Credit Hours)				
1	MCTE 7994	Research Proposal	0	
2	MCTE 7998	Dissertation	21	MCTE 7994
Research only (42 credit hours)				
1	MCTE 7994	Research Proposal	0	
2	MCTE 7999	Thesis	42	MCTE 7995
3	MCTE 7995	Comprehensive Exam	0	MCTE 7994
Course Mode (12 Credit Hours)				
1	MCTE 7997	Project Paper	12	

Programme structure Mode:

W- Coursework only

C- Coursework and Research (Mixed Mode)

T- Research Only