

PROGRAMME : MASTER OF SCIENCE (AUTOMOTIVE ENGINEERING) (MSAE)
TYPE : FULL TIME & PART TIME

TYPE OF COURSES	CREDIT HOURS		
	PROGRAM STRUCTURE (MODE)		
	COURSEWORK ONLY (W)	COURSEWORK AND RESEARCH (C)	RESEARCH ONLY (T)
A. Core Course	15 Credits Hours	9 Credits Hours	0 credit
B. Elective by Specialization	9 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 -

Select 3 courses for Mixed Mode, Select 5 courses by Course Mode

No.	Course Code	Course Title	Credit Hours	Pre-Requisite
1.	MECH 7326	Automotive Integrated Design (C&W)	3	
2.	MECH 7320	Automotive Manufacturing Processes (C&W)	3	
3	MECH 7310	Advanced Internal Combustion Engines.(C& W)	3	
4.	MECH 7311	Advanced Vehicle Structural Design and Analysis (C&W)	3	
5.	MECH 7316	Automotive Control Systems (C&W)	3	

B. ELECTIVE BY SPECIALIZATION

Select 2 courses for Mixed Mode, Select 3 courses by Course Mode

No.	Course Code	Course Title	Credit Hours	Pre-Requisite
Structure				
1	MECH 7311	Advanced Vehicle Structural Design and Analysis.	3	
2	MECH 7312	Advanced Vehicle Dynamics.	3	
3	MECH 7314	Advanced Materials for Automotive Applications.	3	
4	MECH 7402	Advanced Vibration.	3	
5	MECH 7319	Reliability Engineering for Automotive Applications	3	
6	MECH 7401	Finite Element Method	3	
7	MECH 7321	Special Topics in Automotive Engineering*	3	

Vehicle Electronics and System				
1	MECH 7327	Electric and Hybrid Vehicles	3	
2	MECH 7328	Intelligent Vehicle System	3	
3	MECH 7318	Design of Automotive Transmission Systems	3	
4	MECH 7319	Reliability Engineering for Automotive Applications	3	
5	MECH 7316	Automotive Control Systems.	3	
6	MECH 7321	Special Topics in Automotive Engineering*	3	
Thermofluid				
1	MECH 7329	Biofuels and Combustion	3	
2	MECH 7313	Vehicle Aerodynamics.	3	
3	MECH 7318	Design of Automotive Transmission Systems	3	
4	MECH 7319	Reliability Engineering for Automotive Applications	3	
5	MECH 7321	Special Topics in Automotive Engineering*	3	

C. UNIVERSITI REQUIRED COURSE

No.	Course Code	Course Title	Credit Hours	Pre-requisite
1	RKGS 7000	Values, Technology and Society (For C & W)	3	
2	RKGS 7001	Values, Technology and Society (For T)	0	
3	MECH 7950	Research Methodology and Seminar (For C & W)	3	
4	MECH 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	MECH 7994	Research Proposal	0	
2	MECH 7998	Dissertation	21	MECH 7994
Research only (42 credit hours)				
1	MECH 7994	Research Proposal	0	
2	MECH 7999	Thesis	42	MECH 7995
3	MECH 7995	Comprehensive Exam	0	MECH 7994
Course Mode (12 Credit hours)				
1	MECH 7997	Project Paper	12	