

INSTITUTE OF SCIENCE AND ENGINEERING
AUTOMOTIVE MECHATRONICS AND INTELLIGENT VEHICLES M.Sc. (WITH THESIS) GRADUATE PROGRAM CURRICULUM

ELECTIVE COURSES

Semester 1

Code	Course Title	T	A	C	ECTS	Status
SECOND FOREIGN LANGUAGE						
DEPARTMENTAL ELECTIVE						
AUTO523	Advanced Vehicle Dynamics	3	0	3	10	Elective
AUTO529	Advanced Internal Combustion Engines	3	0	3	10	Elective
AUTO527	Automotive Electrics and Electronics	3	0	3	10	Elective
MCHT623	Mechatronic Systems Design	3	0	3	10	Elective
AUTO525	Intelligent Automotive Production	3	0	3	10	Elective
AUTO521	Advanced Topics in Engineering Mathematics	3	0	3	10	Elective
MCHT627	Advanced Thermodynamics	3	0	3	10	Elective
MCHT629	Advanced Fluid Mechanics	3	0	3	10	Elective
EEE527	Advanced Electric Drives	3	0	3	10	Elective
EEE523	Clean Energy Technology and Energy Storage Systems	3	0	3	10	Elective
EEE525	Advanced Power Electronics	3	0	3	10	Elective
EEE631	Advanced Electrical Distribution System	3	0	3	10	Elective
FACULTY ELECTIVE						
UNIVERSITY ELECTIVE						

Semester 2

Code	Course Title	T	A	C	ECTS	Status
SECOND FOREIGN LANGUAGE						
DEPARTMENTAL ELECTIVE						
AUTO524	Vehicle Dynamics Control	3	0	3	10	Elective
MCHT626	Theory and Design of Advanced Control Systems	3	0	3	10	Elective
AUTO526	Autonomous Vehicles	3	0	3	10	Elective
EEE524	Electric and Hybrid Electric Vehicles	3	0	3	10	Elective
EEE526	DSP-Based Electromechanical Motion Control	2	2	3	10	Elective
EEE522	Harmonics Analysis and Partial Differential Equations	3	0	3	10	Elective
AUTO528	Vehicle Perception in ROS	3	0	3	10	Elective
FACULTY ELECTIVE						
UNIVERSITY ELECTIVE						

Semester 3

Code	Course Title	T	A	C	ECTS	Status
SECOND FOREIGN LANGUAGE						
DEPARTMENTAL ELECTIVE						
FACULTY ELECTIVE						
UNIVERSITY ELECTIVE						

Semester 4

Code	Course Title	T	A	C	ECTS	Status
SECOND FOREIGN LANGUAGE						
DEPARTMENTAL ELECTIVE						
FACULTY ELECTIVE						
UNIVERSITY ELECTIVE						

Semester 5

Code	Course Title	T	A	C	ECTS	Status
SECOND FOREIGN LANGUAGE						
DEPARTMENTAL ELECTIVE						
FACULTY ELECTIVE						
UNIVERSITY ELECTIVE						

Semester 6

Code	Course Title	T	A	C	ECTS	Status
SECOND FOREIGN LANGUAGE						
DEPARTMENTAL ELECTIVE						
FACULTY ELECTIVE						
UNIVERSITY ELECTIVE						

Semester 7

Code	Course Title	T	A	C	ECTS	Status
SECOND FOREIGN LANGUAGE						
DEPARTMENTAL ELECTIVE						
FACULTY ELECTIVE						

Semester 8

Code	Course Title	T	A	C	ECTS	Status
SECOND FOREIGN LANGUAGE						
DEPARTMENTAL ELECTIVE						
FACULTY ELECTIVE						

UNIVERSITY ELECTIVE						

UNIVERSITY ELECTIVE						