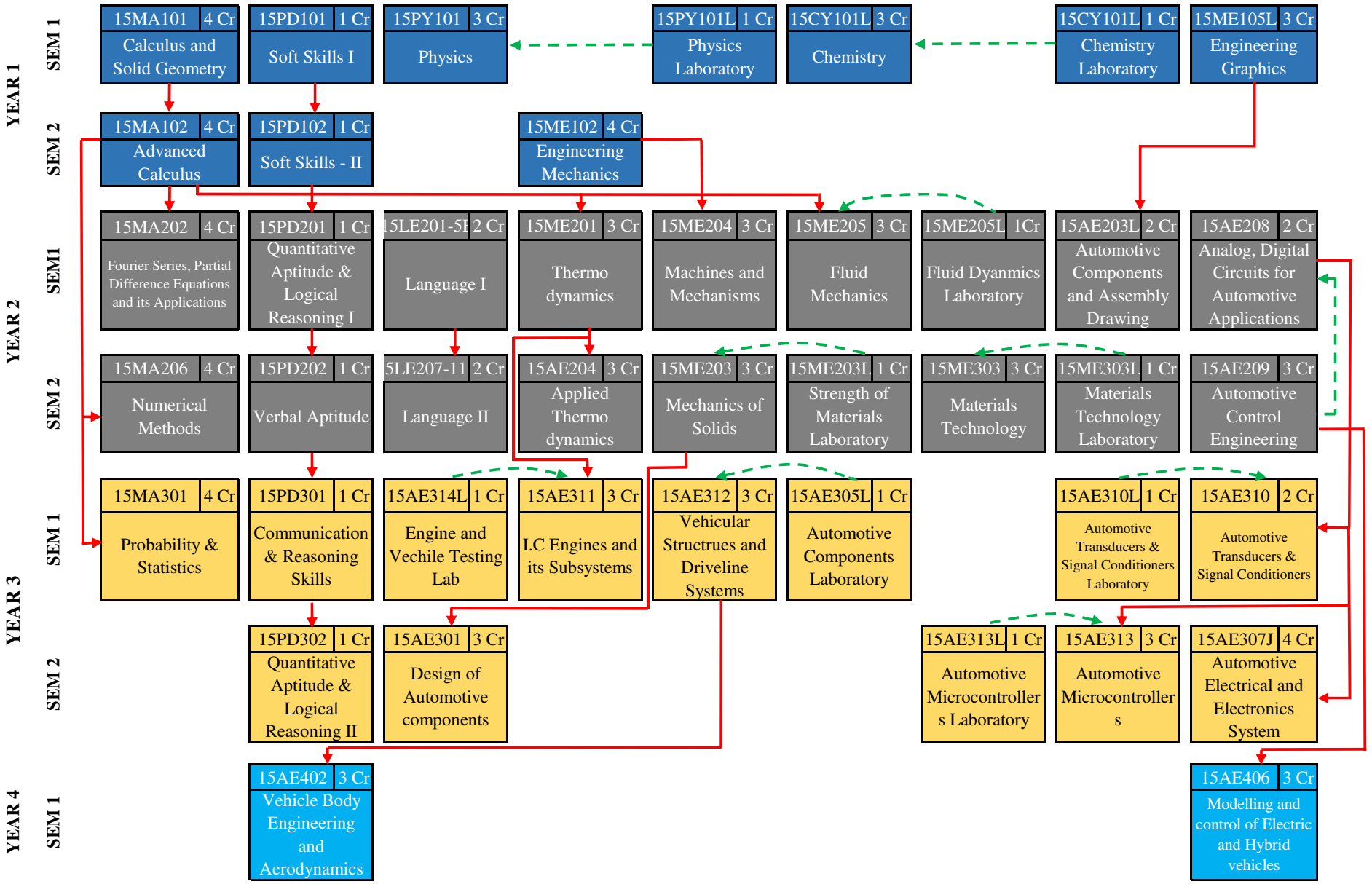
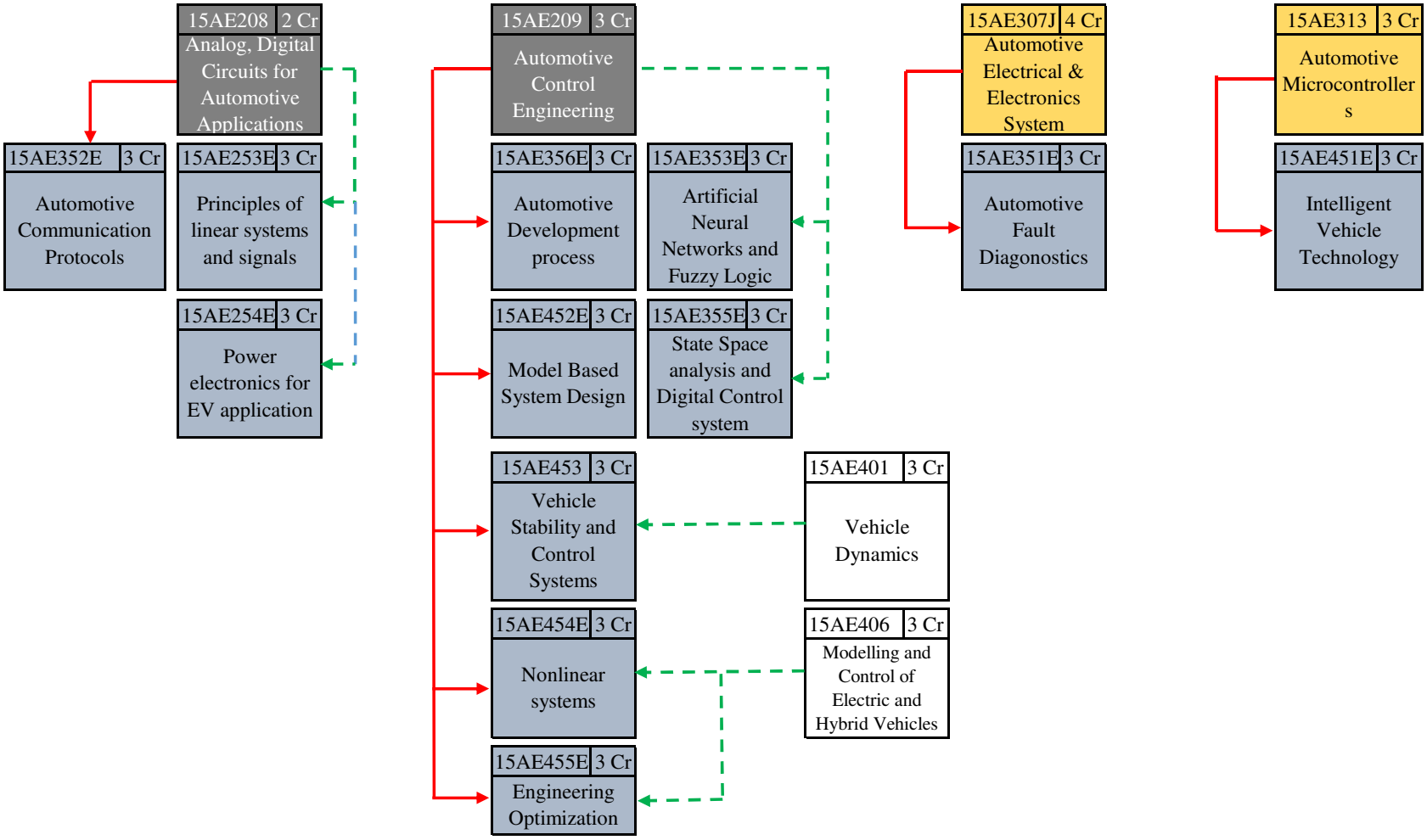
SRM UNIVERSITY
DEPARTMENT OF AUTOMOBILE ENGINEERING
PRE AND CO REQUISITE CHART



SRM UNIVERSITY
DEPARTMENT OF AUTOMOBILE ENGINEERING
PRE AND CO REQUISITE CHART



DEPARTMENT OF AUTOMOBILE ENGINEERING B.Tech Automobile Engineering (with Specialization in Automotive Electronics)			
Course Code	**Course title**	**Pre-requisites**	**Co-requisites**
SEMESTER - I			
15PD101	Soft Skills		
15MA101	Calculus And Solid Geometry		
15PY101	Physics		
15PY101L	Physics Lab		15PY101
15CS101L	Programming Lab		
15CY101	Chemistry		
15CY101L	Chemistry Lab		15CY101
15BT101	Biology For Engineers		
15EE101	Basic Electrical Engineering		
15CE101	Basic Civil Engineering		
SEMESTER - II			
15LE101	English		
15LE102	Value Education		
15PD102	Soft Skills – II		
15NC/NS/SP/ YG101	NSS/NCC/Yoga/Sports		
15MA102	Advanced Calculus And Complex Analysis	15MA101	
15PY102	Material Science		
15CY102	Principles Of Environmental Science		
15EC101	Basic Electronics Engineering		
15ME101	Basic Mechanical Engineering		
15ME104L	Workshop Practice		
15ME105L	Engineering Graphics		
15ME102	Engineering Mechanics		
15AE102L	Automotive Basic Science Laboratory		
SEMESTER - III			
15LE201E/ 15LE202E/ 15LE203E/ 15LE204E/ 15LE205E	German Language - I/ French Language - I/ Japanese Language - I/ Korean Language -I/ Chinese Language - I		
15PD201	Quantitative Aptitude & Logical Reasoning – I		
15MA202	Fourier Series, Partial Differential Equations and its Applications	15MA102/ 15MA205B	
15ME201	Thermodynamics	15MA102	
15ME204	Machines and Mechanisms	15ME102	
15ME205	Fluid Mechanics	15MA102	
15AE201J	Manufacturing Technology for Automotive Engineers		
15AE208	Analog, Digital Circuits for Automotive Applications		
15AE203L	Automotive Components and Assembly Drawing	15ME105L	
SEMESTER – IV			
15LE207E/ 15LE208E/ 15LE209E/ 15LE210E/ 15LE211E	German Language -II/ French Language -II/ Japanese Language -II/ Korean Language -II/ Chinese Language- II		
15PD202	Verbal Aptitude	15PD201	
15MA206	Numerical Methods	15MA102/ 15MA205B	
15AE204	Applied Thermal Engineering for Automotive Engineers	15ME201	
15ME203	Mechanics of Solids	15MA102	
15ME303	Materials Technology		
15AE209	Automotive Control Engineering		15AE208
15ME203L	Strength of Materials Laboratory		15ME203

15ME303L	Materials Technology Laboratory		15ME303
15AE375L/ 15AE380L/ 15AE385L/ 15AE490L	Minor Project- I/ Seminar- I/ Massive Open Online Courses (MOOCs)-I/ Industrial Module- I		
	Departmental Elective I		
SEMESTER – V			
15PD301	Communication & Reasoning Skills	15PD202	
15MA301	Probability and Statistics	15MA102/ 15MA205B	
15AE310	Automotive Transducers and Signal Conditioners	15AE208	
15AE311	I.C Engines and its Subsystems	15ME201	
15AE312	Vehicular Structures and Driveline Systems		
15AE314L	Engine and Vehicle Testing Laboratory		15AE310
15AE305L	Automotive Components Laboratory		15AE305L
15AE310L	Automotive Transducers and Signal Conditioners		15AE310
15AE390L	Industrial Training -I (To be done after IV Semester)		
	Departmental Elective – II		
	Open Elective – I		
SEMESTER – VI			
15PD302	Quantitative Aptitude & Logical Reasoning – II		
15ME304	Fluid Power Control		
15AE301	Design of Automotive Components	15ME203	
15AE307J	Automotive Electrical & Electronics System	15AE208	
15AE313	Automotive Microcontrollers	15AE208	
15AE313L	Automotive Microcontrollers Laboratory		15AE313
15AE376L/ 15AE381L/ 15AE386L/ 15AE491L	Minor Project- II/ Seminar -II/ Massive Open Online Courses (MOOCs) -II/ Industrial Module-II		
	Departmental Elective – III		
	Open Elective - II		
SEMESTER - VII			
15AE401	Vehicle Dynamics		
15AE402	Vehicle Body Engineering And Aerodynamics	15AE302/ 15AE312	
15AE404M	Multi-Disciplinary Design		
15AE406	Modelling and Control of Electric and Hybrid Vehicles	15AE209	
15AE401L	Vehicle Dynamics Laboratory		15AE401
15AE406L	Electric Vehicular Systems Laboratory		15AE406
15AE391L	Industrial Training –II (To be done after VI Semester)		
	Departmental Elective – IV		
	Departmental Elective – V		
SEMESTER - VIII			
15AE496L	Major Project/Practice School		

DEPARTMENT OF AUTOMOBILE ENGINEERING DEPARTMENTAL ELECTIVES			
Course Code	**Course Title**	**Pre- requisites**	**Co-requisites**
DESIGN			
15AE253E	Principles of linear systems and signals	NIL	15AE208
15AE254E	Power electronics for EV application	NIL	15AE208
15AE351E	Automotive Fault Diagnostics	15AE307J	NIL
15AE352E	Automotive Communication Protocols	15AE208/15AE202	NIL
15AE353E	Artificial Neural Networks and Fuzzy Logic	NIL	15AE209 / 15AE251E
15AE355E	State Space analysis and Digital Control system	NIL	15AE209
15AE356E	Automotive Development process	15AE209	NIL
15AE451E	Intelligent Vehicle Technology	15AE313/15AE251E	NIL
15AE452E	Model Based System Design	15AE209 /15AE251E	NIL
15AE453E	Vehicle Stability and Control Systems	15AE209	15AE401
15AE454E	Nonlinear systems	15AE209	15AE406
15AE455E	Engineering Optimization	15AE209	15AE406