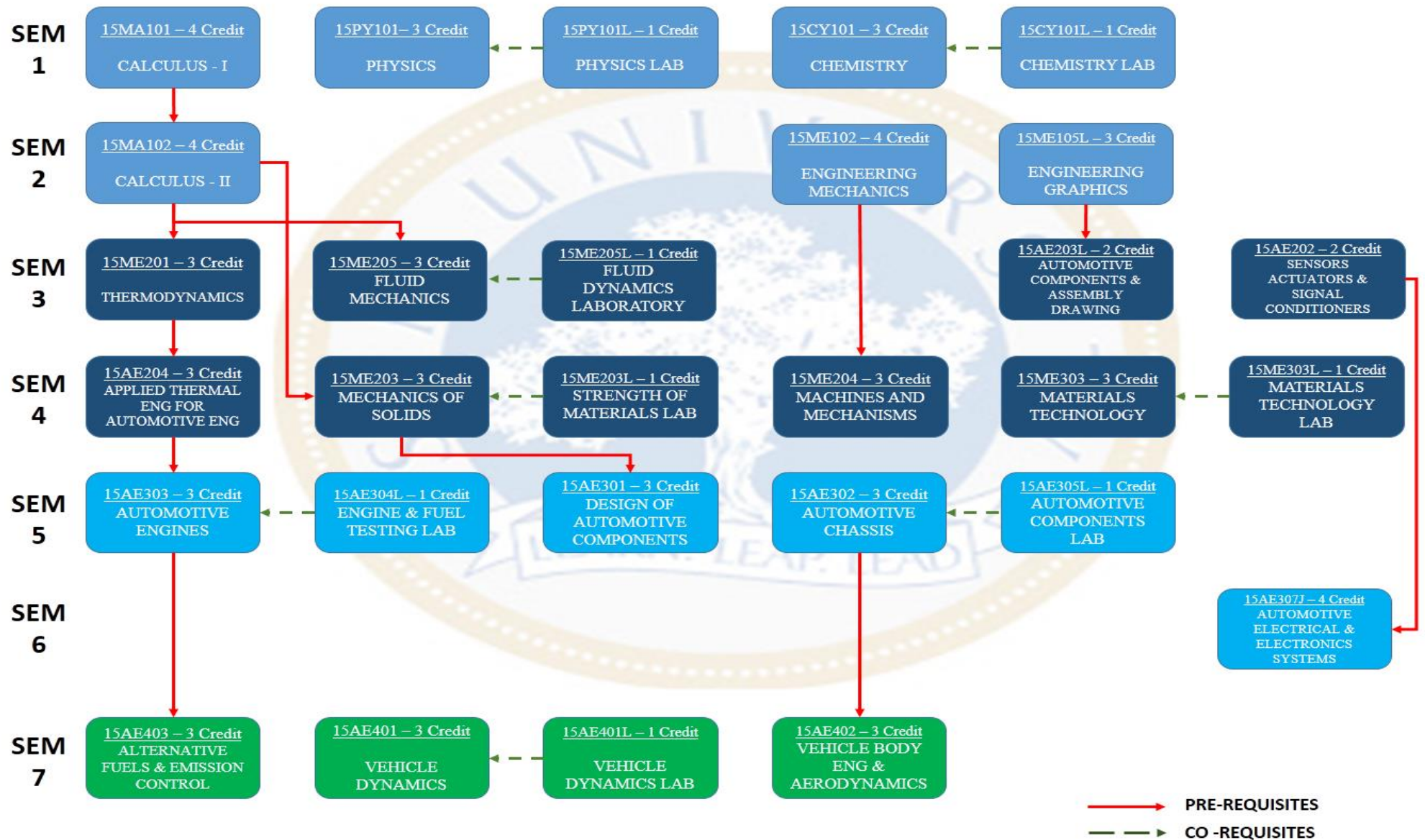


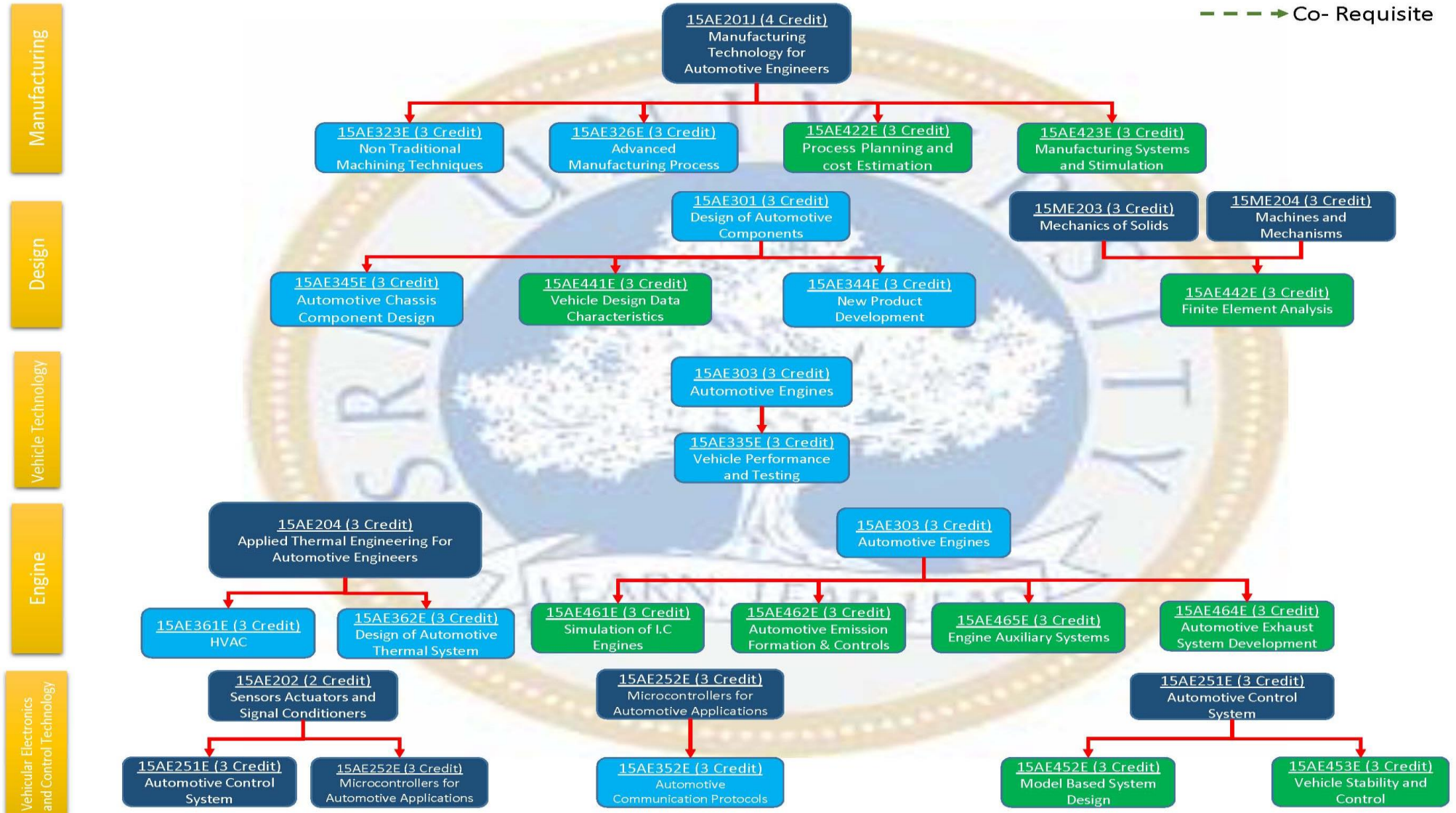
DEPARTMENT OF AUTOMOBILE ENGINEERING



DEPARTMENT OF AUTOMOBILE ENGINEERING

DEPARTMENTAL ELECTIVE LIST

→ Pre Requisite
- - - → Co- Requisite



DEPARTMENT OF AUTOMOBILE ENGINEERING			
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		
15AE101L	Artifact Dissection		
SEMESTER - III			
	Language		
15PD201	Aptitude		
15MA202	Fourier Series, Partial Differential Eqn & Its Applications		
15ME201	Thermodynamics	15MA102	
15ME205	Fluid Mechanics	15MA102	
15AE201J	Manufacturing Technology For Automotive Engineers		
15AE202	Sensors Actuators And Signal Conditioners		
15AE203L	Automotive Components Assembly Drawing	15ME105L	
15ME205L	Fluid Dynamics Lab		15ME205
SEMESTER - IV			
	Language		
15PD202	Aptitude-II		
15MA206	Numerical Methods		
15ME203	Mechanics Of Solids	15MA102	
15ME303	Materials Technology		
15ME204	Machines And Mechanisms	15ME102	
15AE204	Applied Thermal Engineering For Automotive Engineers	15ME201	
15ME203L	Strength Of Materials Laboratory		15ME203
15ME303L	Materials Technology Laboratory		15ME303
15AE375L	Minor Project I		
15AE380L	Seminar I		
15AE385L	MOOCs I		
15AE490L	Industry Modules I		
	Dep Elective I		
SEMESTER - V			
15PD301	Aptitude-III		
15MA301	Probability And Statistics		
15AE301	Design Of Automotive Components	15ME203	
15AE302	Automotive Chassis		
15AE303	Automotive Engines	15AE204	

15AE304L	Engine And Fuel Testing Laboratory		15AE303
15AE305L	Automotive Components Laboratory		15AE302
15AE390L	Industrial TrainingI		
	Dep Elective - II		
	Open Elective - I		
SEMESTER - VI			
15PD302	Aptitude - IV		
15ME304	Fluid Power Control		
15AE307J	Automotive Electrical And Electronic Systems	15AE202	
15AE308J	Cad Analysis For Automotive Engineers		
15AE309	Automotive Transmission		
15AE375L/ 15AE381L/ 15AE386L/ 15AE491L	Minor Project-II Seminar-II Massive Open Online Courses (MOOCs)-II Industrial Module -II		
	Dep Elective - III		
	Open Elective - II		
SEMESTER - VII			
15AE401	Vehicle Dynamics		
15AE402	Vehicle Body Engineering And Aerodynamics	15AE302	
15AE403	Alternative Fuels And Emission Control	15AE303	
15AE404M	Multi Disciplinary Design		
15AE401L	Vehicle Dynamics Laboratory		15AE401
15AE405L	Vehicle Testing Laboratory		
15AE391L	Industrial Training II		
	Dep.Elective IV		
	Dep.Elective V		
	Dep.Elective VI		
SEMESTER - VIII			
15AE496L	Major Project/Practice School		

DEPARTMENT OF AUTOMOBILE ENGINEERING DEPARTMENTAL ELECTIVES			
Course Code	Course Title	Pre-requisites	Co-requisites
DESIGN			
15AE341E	Automotive Driveline Design		
15AE342E	Design For Safety And Comfort		
15AE343E	Design For Race Cars		
15AE344E	New Product Development	15AE301	
15AE345E	Automotive Chassis Component Design	15AE301	
15AE441E	Vehicle Design Data Characteristics	15AE301	
15AE442E	Finite Element Analysis	15ME203 15ME204	
15AE443E	Concept Of Engineering Design		
MANUFACTURING			
15AE221E	Welding And Joining Techniques		
15AE222E	Automotive Component Manufacturing		
15AE321E	Non Destructive Testing		
15AE322E	Composite Materials And Structures		
15AE323E	Non Traditional Machining Techniques	15AE201J	
15AE324E	Industrial Engineering And Operations Research		
15AE325E	Agile Manufacturing		
15AE326E	Advanced Manufacturing Process	15AE201J	
15AE421E	Computer Integrated Manufacturing		
15AE422E	Process Planning And Cost Estimation	15AE201J	
15AE423E	Manufacturing Systems And Simulation	15AE201J	
15AE424E	Automotive Quality System		
VEHICLE TECHNOLOGY			
15AE331E	Auxiliary Vehicle Systems		
15AE332E	Automotive NVH		
15AE333E	Two And Three Wheeler Technology		
15AE334E	Special Types Of Vehicles		
15AE335E	Vehicle Performance And Testing	15AE303	
15AE336E	Advanced Vehicle Technology		
15AE431E	Automotive Safety And Ergonomics		
15AE432E	Vehicle Maintenance		
15AE433E	Tyre Technology		
15AE434E	Automotive Standards And Regulations		
15AE435E	Motorsport Technology		
ENGINE			
15AE361E	HVAC	15AE204	
15AE362E	Design Of Automotive Thermal System	15AE204	
15AE363E	Engine Testing And Validation		
15AE364E	Advanced Engine Technology		
15AE461E	Simulation Of IC Engine	15AE303	
15AE462E	Automotive Emission Formation And Control	15AE303	
15AE463E	Fuel Testing And Standards		
15AE464E	Automotive Exhaust System Development	15AE303	
15AE465E	Engine Auxiliary Systems	15AE303	
VEHICULAR ELECTRONICS AND CONTROL TECHNOLOGY			
15AE251E	Automotive Control System	15AE202	
15AE252E	Microcontrollers For Automotive Applications	15AE202	
15AE351E	Automotive Fault Diagnostics		
15AE352E	Automotive Communication Protocols	15AE252E	
15AE353E	Artificial Neural Network And Fuzzy Logic		
15AE354E	Electric And Hybrid Vehicle		
15AE451E	Intelligent Vehicle Technology		
15AE452E	Model Based System Design	15AE251E	
15AE453E	Vehicle Stability And Control	15AE251E	