

Faculty of Mechanical Engineering
M.E. Automobile Engineering
(R 2017) Semester – I
AM5111 ENGINE AND CHASSIS LABORATORY
(Requirements for a batch of 25 students)

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	120kW Steady State Engine Test Bed	1		
2.	Multi Cylinder Petrol Engine with Air Cooled Eddy Current Dynamometer	1		
3.	Multi Cylinder Diesel Engine with Air Cooled Eddy Current Dynamometer	1		
4.	Diesel Engine Fuel Supply System demonstration kit	1		
5.	Petrol Engine Fuel Supply System demonstration kit	1		
6.	Two post Lift	1		
7.	3D-Wheel Aligner	1		
8.	Air Compressor	1		
9.	Wheel Balancer	1		
10.	VCR Engine Test Setup 1 Cylinder 4 Stroke engine	1		
11.	Front Axle	1		
12.	Rear Axle	1		
13.	Differential Unit	1		
14.	Diaphragm Clutch Assembly	1		
15.	Single Plate Clutch Assembly	1		
16.	Multiplate Clutch Assembly	1		

17.	Gearbox (Light Duty)	1		
18.	Gearbox (Heavy Duty)	1		
19.	Gearbox (Constant Mesh)	1		
20.	Steering system	1		
21.	Dismantling & Assembly of Power Steering System	1		
22.	Steering Gear box	1		
23.	Dismantling & Assembly of Pneumatic Brake System	1		
24.	Dismantling & Assembly of Brake System	1		
25.	Automatic Transmission Gearbox	1		
26.	Four Wheel Drive Transfer box	1		
27.	Hydraulic Servo Vacuum Brake (Motorized Vacuum brake pump)	1		
28.	Epicyclic Gear Box Model	1		

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(R 2017) Semester – II
AM5211 AUTOMOTIVE ELECTRICAL AND ELECTRONICS LABORATORY
(Requirements for a batch of 25 students)

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Different rated automotive Lead Acid battery	3		
2.	Battery Charger	1		
3.	Different rated automotive Starting System	3		
4.	Any Automotive Starter Motor Test Rig	1		
5.	Different rated automotive charging System	3		
6.	Any Automotive Alternator Test Rig	1		
7.	Different rated automotive Ignition System	2		
8.	Any automotive body control unit that can demonstrate the various features like power window operation, wiper control function , door opening and closing etc	1		
9.	Any one automotive lighting system kit to demonstrate to the students	1		
10.	At least five different automotive sensor and actuators	5		
11.	Bread board	50		
12.	IC's 7400,7402,7404,7408,7432,7486	50		
13.	IC's 555	20		
14.	IC's for MUX & DEMUX, Power Supplies need to be serviced	15		

15.	IC's 7447, Seven Segment Display	30		
16.	Microprocessor Kit needs to be serviced	1		
17.	ADC and DAC	5		
18.	Interfacing Sensors	10		
19.	Display, Keyboard, Microcontroller, Interfacing Convertor / Connector	10		
20.	Matlab based virtual Instrumentation	30		
21.	Any Embedded System Kit	6		

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(R 2017) Semester – III
AM5311 COMPUTER AIDED VEHICLE DESIGN LABORATORY
(Requirements for a batch of 25 students)

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Computer with keyboard and optical mouse (8 GB Ram , i7 Processor , 2 GB graphics card)	25		
2.	CATIA	25		
3.	ANSYS	25		