



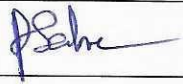

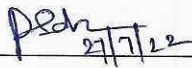

Department of Automobile Engineering	LP: AE18712
B.E/B.Tech/M.E/M.Tech : Automobile Engineering	Rev. No: 00
PG Specialisation : Not Applicable	Date: 05-08-2021
Sub. Code / Sub. Name : AE18712 / VEHICLE SIMULATION LABORATORY	

Session No*	List of Experiments
CYCLE-I	
1	Determination of vehicle velocity dependent resistive force coefficients.
2	Modeling and simulation of single degree of freedom system of a vehicle with damper and without damper
3	Modeling and simulation of two – degree of freedom system of a vehicle during pitching and bouncing
4	Modeling and simulation of multi degrees of freedom of a Quarter car and half car model.
5	Modeling and simulation of simple longitudinal dynamics model of a vehicle which is subjected to various forces
CYCLE-II	
6	Modeling and simulation of a bicycle model vehicle steady state handling characteristics.
7	Modeling and simulation of transient handling characteristics of a vehicle.
8	Modeling and simulation of automotive braking system.
9	Modeling and simulation of load transfer effect during braking and acceleration.
10	Modeling and simulation of simple automotive steering system.
Content beyond syllabus (if any):	

* Session Duration: 150 minutes



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	Prepared by	Approved by
Signature		
Name	R. SAKTHIVEL	Dr. J. VENKATESAN
Designation	ASSISTANT PROFESSOR	PROFESSOR & HOD
Date	5-08-2021	05/08/2021
Remarks* :	The same lesson plan can be followed for this odd semester for the Academic year 2022-23  27/7/22	
Remarks* :	The same lesson plan can be followed for this odd semester for the Academic year 2023-24.  16/7/23	

* If the same lab plan is followed in the subsequent semester/year it should be mentioned and signed by the Faculty and the HOD