ACADEMIC CURRICULA

UNDERGRADUATE DEGREE PROGRAMMES

Bachelor of Technology

(B.Tech. - Four Years)

(Choice Based Flexible Credit System)

Regulations 2018

Volume - 1

(Revised in March 2019)



SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

(Deemed to be University u/s 3 of UGC Act, 1956)

Kattankulathur, Kancheepuram District 603203, Tamil Nadu, India



2. B.Tech. in Automobile Engineering

2. (a) Mission of the Department

Mission Stmt - 1	To impart students with quality education centered on altering global requirements and add values to their career desires
Mission Stmt - 2	To enhance the knowledge and skill of students in collaboration with public and private sectors
Mission Stmt - 3	To identify and acknowledge economic, social and environmental issues that influences the quality of life in the vicinity and the globe
Mission Stmt - 4	To inculcate leadership qualities needed for automotive industries through robust curriculum with international outlook for sustainable
IVIISSION SUM - 4	future
Mission Stmt - 5	To build trust and co-operation at the workplace through effective inter-personal and communication skills

2. (b) Program Educational Objectives (PEO)

PEO - 1	Pursue advanced education, research and development, and other creative and innovative efforts in Automobile engineering
PEO - 2	Successfully apply analytical techniques, problem-solving skills necessary to adapt to technological changes and for a career in the field of
FEO-2	automo <mark>bile and mech</mark> anical engineering
PEO - 3	Implement their engineering knowledge acquired from projects, laboratory experimentation, classroom lectures and demonstrations to
PEU - 3	acknowledge the full range of technical and associated environmental issues
PEO - 4	Efficaciously use their communication skills in oral, written, visual and graphic modes within interpersonal, team, and group environments
PEO - 5	Retain the intellectual curiosity that motivates lifelong learning making them versatile to the rapidly evolving industrial challenges

2. (c) Mission of the Department to Program Educational Objectives (PEO) Mapping

	Mission Stmt 1	Mission Stmt 2	Mission Stmt 3	Mission Stmt 4	Mission Stmt 5
PEO - 1	Н	M	M	L	L
PEO - 2	H	M	M	Н	L
PEO - 3	Н	Н	M	M	Н
PEO - 4	M	H	H	M	H
PEO - 5	Н	M	Н	Н	M

H – High Correlation, M – Medium Correlation, L – Low Correlation

2. (d) Mapping Program Educational Objectives (PEO) to Program Learning Outcomes (PLO)

						Progra	am Lear	ning Ou	tcomes	(PLO)					
					Gra	aduate At	tributes (0	GA)		1	×		Proj Out	gram Spe comes (P	cific SO)
	Engineering Knowledge	Problem Analysis	Design & Development	Analysis, Design, Research	Modern Tool Usage	Society & Culture	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO - 1	PSO - 2	PSO - 3
PEO - 1	Н	L	М	М	Н	L	L	М	М	Н	L	Н	Н	М	Н
PEO - 2	Н	Н	М	Н	М	L	L	L	Н	М	М	Н	М	М	Н
PEO - 3	Н	Н	Н	Н	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н
PEO - 4	L	М	L	L	М	L	М	Н	Н	Н	М	М	М	М	L
PEO - 5	М	М	М	М	М	Н	М	Н	Н	М	М	М	М	М	М

H – High Correlation, M – Medium Correlation, L – Low Correlation

PSO – Program Specific Outcomes (PSO)

PSO - 1	Ability to implement the knowledge of the design, manufacture, and maintenance of major subsystems and technologies associated with
F30 - 1	automobiles for sustainable professional career
PSO - 2	Ability to comprehend and communicate effectively within a multidisciplinary working environment in the context of the emerging technologies.
PSO - 3	Ability to acquire technical and managerial skill that makes them an employable graduate.

2. (e) Program Structure: B.Tech. in Automobile Engineering

Course		Humanities & Social Sciences							Basic Science Courses (B)				
Course								Course		Hou	urs/ W	eek	
Second Code Code	Course		Ца	uro/\A	look		- 1			-			С
											· ·		
				-			18	8PYB101J		3	1	2	5
IRAMBOTT Calculus and Linear Algebra			2	0	2	3		0CVD1011		2	1	2	5
		French										_	
Total Learning Credits		German	2	0	2	3							4
Total Learning Credits	18LEH105J	Japanese									_		4
	18LEH106J	Korean										_	4
IRPOH103T Management Principles for Engineers 2 0 0 2 1			0	0	2	1	18	8BTB101T	Biology	2	0	0	2
IRPDH2017 Employability Skills & Practices			2						Total Learning Credits				28
SPDH/2017 Employability Skills & Practices O 0 2 1 Total Learning Credits Title													
Total Learning Credits				-					Professional Core Courses (C)				
Course	TOT DITECTT			0				Course		Ног	ırs/ W	eek	
Course		Total Learning Credits				12				-	т		_
Course		Engineering Science Courses (S)					10			_	1		
Total Learning Credits	Course		Ца	uro/\A	look		10	DIVIECTOTT		3	1	U	4
Course C			пос			_	18	8AUC201J		3	0	2	4
Indistribution Indi		* -	L										Ļ
Table Stroll Basic Livil and Mechanical Engineering 3 1 2 5 1								8ALIC2041		n	0	4	2
BROSS1011 Programming for Problem Solving 3 0 4 5 18AUS101L Afficat Dissection Laboratory 0 0 2 1 18MES201T Engineering Mechanics 3 1 0 4 18MES201T Engineering Mechanics 3 0 0 2 18MEC109L Engineering Mechanics 3 0 0 2	18MES102J	Basic Civil and Mechanical Engineering	3			5	70	UNUUZUTL	drawing		U	7	
18AUS101L Artifact Dissection Laboratory	18EES102L	Electrical and Electronics Eng. Workshop	1	0	4	3	18			3	1	0	4
18AUS101L Artifact Dissection Laboratory	18CSS101J	Programming for Problem Solving	3	0	4	5	40	OALICOCOT	Applied Thermal Engineering for Automotive	2		_	
BMES201T Engineering Mechanics 3 1 0 4			0	0	2	1	10	8AUC2031		3	1	U	4
Raw Project Work, Seminar, Internship In Industry Higher Technical Institutions (P)							18	RMFC102T		.3	1	0	4
Project Work, Seminar, Internship In Industry / Higher Technical Institutions (P)	TOWLOZOTT			<u>'</u>							n		1
Note Project Work, Seminar, Internship In Industry Higher Technical Institutions (P) Table T		Total Learning Credits			-	21				_			1
Course				-			10	041102041	Automotive Engines	_	-		4
Course													
Code												-	3
18AUP101L Massive Open Online Course - I 18AUP103L Industrial Training-I 0 0 0 2 1 18AUP103L Seminar - I 18AUP105L Industrial Training-I 0 0 0 2 1 18AUP105L Industrial Training-I 0 0 0 0 1 18AUP105L Industrial Training-I 0 0 0 0 0 1 18AUP105L Industrial Training-I 0 0 0 0 0 1 18AUP105L Industrial Training-I 0 0 0 0 0 0 1 18AUP105L Industrial Training-I 0 0 0 0 0 0 0 1 18AUP105L Industrial Training-I 0 0 0 0 0 0 0 0 1 1	Course	Course	Ηοι	urs/ W	/eek						-	_	4
18AUP103L Industrial Training-I	Code	Title	L	Т	Р	C							4
18AUP102L Industrial Training-I	18AUP101L	Massive Open Online Course - I					18	8MEC111L	Materials Technology Laboratory	0	0	2	1
18AUP103L Seminar - I 18AUC304 CAD Analysis for Automotive Engineers 3 0 2 4 18AUP104L Massive Open Online Course - II 18AUP105L Industrial Training-II 0 0 0 2 1 18AUP107L Minor Project 0 0 0 0 0 18AUP108L Internship (4-6 weeks) 0 0 0 0 0 0 0 18AUP108L Internship (4-6 weeks) 0 0 0 0 0 0 0 0 0	18AUP102I	Industrial Training-I	0	0	2	1	18	8AUC303J	Automotive Electrical and Electronic Systems	3	0	2	4
18AUP105L Industrial Training-II			Ü	ľ	-			8AUC304J	CAD Analysis for Automotive Engineers	3	0	2	4
18AUP105L Industrial Training-II 18AUP105L Industrial Training-II 18AUP107L Minor Project 18AUP108L Internship (4-6 weeks) 15 15 15 16 16 16 16 16	10/10/10/10/1	Manaira Open Oplina Course II								3	0	0	3
Total Learning Credits Total Learning Cred			٥	۸	2	1					0	2	4
18AUP107L Minor Project 18AUP109L Internship (4-6 weeks) 15 15 16 16 16 16 16 16			U	U	2	1					-		1
Total Learning Credits 15 Semester Internship 10 0 0 0 0 0 0 0 0													1
Name			0	0	6	3	10	DAUCOOUT		U		U	57
Total Learning Credits 15 Code Course Title L T P C 18PDM201L Competencies in Social Skills and Practices Course Title Code 18PDM201L Competencies in Social Skills Code 18PDM201L Competencies in Social Ski				Ů	Ů	Ŭ	<u> </u>	_	Total Learning Credits				3/
Total Learning Credits 15 Code Course Title L T P C			Ω	n	20	10	, I—				_		_
Code Course Title L T P C	18AUP110L	Semester Internship	U	0	20	10			Mandatory Courses (M)				
18PDM101L Professional Skills and Practices 0 0 2 0 0 2 0 0 0 2 0 0		Total Learning Credits				15	i -	Codo		П	т	D	_
18PDM201L Competencies in Social Skills 18PDM203L Entrepreneurial Skill Development 18PDM203L Development 18PDM203L Entrepreneurial Skill Development 18PDM203L Development 18PDM204L Developmen							40			L	1		
Course		Once Flori			-	-				U	U	2	U
Course C										0	0	2	0
Code Title L T P C 18PDM204L Business Basics for Entrepreneurs 0 0 2 0 18AUO1017 Hybrid and Electric Vehicles 3 0 0 3 18PDM301L Analytical and Logical Thinking Skills 0 0 2 0 0 0 2 0 0 2							18	3PDM203L	Entrepreneurial Skill Development	ŭ	Ŭ		Ľ
Table Color Title Color Table Tabl	Course		Hou		_		18	3PDM202L	Critical and Creative Thinking Skills	n	n	2	n
18AUO102T Renewable Sources of Energy 3 0 0 3 18PDM302L Entrepreneurship Management 0 0 2 0 18AUO103T Special Type of Vehicles 3 0 0 3 18LEM101T Constitution of India 1 0 0 0 0 1 0	Code	Title	L	Т	Р	С	18	3PDM204L	Business Basics for Entrepreneurs	U	U	2	U
18AUO102T Renewable Sources of Energy 3 0 0 3 18PDM302L Entrepreneurship Management 0 0 2 0 18AUO103T Special Type of Vehicles 3 0 0 3 18LEM101T Constitution of India 1 0 0 0 0 1 0	18AUO101T	Hybrid and Electric Vehicles	3	0	0	3	18	3PDM301L	Analytical and Logical Thinking Skills	_	_	(
18AUO103T Special Type of Vehicles 3 0 0 3 18LEM101T Constitution of India 1 0 0 0 18AU0104T Fuel Cells and Applications 3 0 0 3 18LEM102J Value Education 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 0 2										U	0	2	0
18AUO104T Fuel Cells and Applications 3 0 0 3 18LEM102J Value Education 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 0 2 0 2 0 2 0 2 0 2 0 2 0 0 2 0 18AU0108T Advanced engine technology 3 0 0 3 18GNM103L NCC 0 0 0 2 0 0 2 0 0 2 0 0 2 0 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>0</td> <td>0</td> <td>0</td>										1	0	0	0
18AUO105T Transport Management 3 0 0 3 18GNM101L Physical and Mental Health using Yoga 0 0 2 0 0 2 0 0 2 0 0 2 0 0 0 2 0				_									0
18AUO106T Composite Materials for Automotive Applications 3 0 0 3 18GNM102L NSS 18GNM103L NCC 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0													0
18AUO107T Non Destructive Testing and evaluation 3 0 0 3 18GNM103L NCC 0 0 2 0 18AUO108T Advanced engine technology 3 0 0 3 18GNM104L NSO 18EM109T Indian Traditional Knowledge 1 0 0 0 0 18LEM109T Indian Traditional Knowledge 1 0 0 0 0 18LEM110L Indian Art Form 0 0 0 0 2 0										U	U	2	U
18AUO108T Advanced engine technology 3 0 0 3 18GNM104L NSO 18AUO109T New Product Development 3 0 0 3 18EM109T Indian Traditional Knowledge 1 0 0 0 18LEM110L Indian Art Form 0 0 2 0				-						_	_		
18AUO109T New Product Development 3 0 0 3 18LEM109T Indian Traditional Knowledge 1 0 0 0 18AUO110T Automotive standards and regulations 3 0 0 3 18LEM110L Indian Art Form 0 0 2 0										0	0	2	0
18AUO110T Automotive standards and regulations 3 0 0 3 18LEM110L Indian Art Form 0 0 2 0				0									
18AUO110T Automotive standards and regulations 3 0 0 3 18LEM110L Indian Art Form 0 0 2 0	18AUO109T	New Product Development	3	0	0	3	18	8LEM109T	Indian Traditional Knowledge	1	0	0	0
	18AUO110T	Automotive standards and regulations	3	0	0	3	18	8LEM110L	Indian Art Form	0	0	2	0
18AUO111T Automotive Sciences 3 0 0 3 18CYM101T Environmental Science 1 0 0 0				-	_					1	_		0
18AUO112T Intelligent Vehicle Technology 3 0 0 3	18AUO112T	Intelligent Vehicle Technology					1						,
Total Learning Credits 9	. 3			-	ŭ		-						
I Viai Learning Victure 7		Total Learning Cledits				,	-						

	Professional Elective Courses (E)					1	Professional Elective Courses (E)			
	(Any 6 Courses)					0		Но	urs/	/
Course	Course	Hou	rs/ W	/eek		Course	Course	We	eek	
Code	Title	L	Τ	Ρ	С	Code	Title	L.	ſF	С
	Sub-stream: Manufacturing						Sub-stream: Design		Ī	
	Automotive Components Manufacturing	3	0	0	3	18AUE341T	Automotive Driveline Design	3 (0 0	3
	Welding and Joining Technique	3	0	0	3	18AUE342T	Automotive Chassis Component Design			3
18AUE323T	Automotive Surface Engineering	3	0	0	3	18AUE344T	Concepts of Engineering Design	3 (0 (3
18AUE324T	Agile Manufacturing	3	0	0	3	18AUE345T	Rapid prototyping and tooling	3 (0 0	3
18AUE325T	Manufacturing Systems and Simulation	3	0	0	3	18AUE346T	Modeling and Control of Vibration in Mechanical Systems	3 (0 0	3
18AUE326T	Composite Materials and Structures	3	0	0	3		Geometrical Dimensioning and Tolerance	3 (0 (3
18AUE327T	Metrology and Measurements	3	0	0	3		Design for Manufacture	3 (0 0	3
18AUE421T	Advanced Manufacturing Process	3	0	0	3	18AUE441T	Optimization techniques in Engineering Design	3 (0 0	3
18AUE422T	Computer Integrated Manufacturing	3	0	0	3	18AUE442T	Multibody Dynamics	3 (0 (3
18AUE423T	Process Planning and Cost Estimation	3	0	0	3	18AUE443T	Finite Element Analysis	3 (0 0	3
18AUE424T	Automotive Quality Systems	3	0	0	3		Design of Experiments	3 (0 0	3
18AUE425T	Industrial Engineering and Operational	3	0	0	3		Product Life Cycle Management	3 (0 (3
10AUE4231	Research	3	U	U	3		Sub-stream : Vehicular Technologies		T	T
	Sub-stream: Engine					18AUE351T	Auxiliary vehicle systems	3 (0 0	3
18AUE331T	Heat ventilation and air conditioning	3	0	0	3	18AUE352T	Two and three wheeler technology	3 (0 0	3
18AUE332T	Engine testing and validation	3	0	0	3	18AUE353T	Vehicle performance and testing	3 (0 (3
18AUE333T	Fuel testing and standards	3	0	0	3	18AUE354T	Tyre technology	3 (0 (3
18AUE334T	Automotive exhaust system development	3	0	0	3	18AUE355T	Motorsport technology	3 (0 0	3
18AUE335T	Engine auxiliary systems	3	0	0	3	18AUE356T	Automotive NVH	3 (0 0	3
18AUE431T	Design of automotive thermal system	3	0	0	3	18AUE451T	Advanced vehicle technology	3 (0 (3
18AUE432T	Simulation of Internal Combustion engines	3	0	0	3	18AUE452T	Automotive safety and ergonomics	3 (0 0	3
18AUE433T	Automotive emission formation and controls	3	0	0	3	18AUE453T	Vehicle maintenance	3 (0 (3
18AUE434T	Alternative fuels and energy systems	3	0	0	3	18AUE454T	Vehicle body engineering and Aerodynamics	3 () (3
						18AUE455T	Machine Learning Approach for Automotive Applications	3 () (3
							Sensors, Actuators and Signal Conditioners		0 0	3
				П.			Automotive Control Engineering	2 (0 2	2 3

2. (f) Program Articulation: B. Tech. in Automobile Engineering

			F	ro	gran	n Le	ear	nin	g C)uto	con	nes	(P	LO)	
					Gr	adua	ate A	Attrik	outes	3	4				PSO	
Course Code	Course Name	Engineering Knowledge	Problem Analysis	Design & Development	Analysis, Design, Research		Society & Culture	Environment &	Ethics	☐ Individual & Team Work	Communication Com	Project Mgt. & Finance	Life Long Learning	H PS0-1	PSO - 2	H PSO-3
18AUS101L	Artifact Dissection Laboratory	H	М	L	H		L	М	М			L	Н	Н	М	Н
18AUC201J	Manufacturing Technology for Automotive Engineers	Н	М	М	М	Н	L	М	М	Н	М	М	Н	Н	Н	Н
18AUC203T	Applied Thermal Engineering for Automotive Engineers	Н	М	L	L	М	L	М	М	Н	Н	М	Н	Н	Н	Н
18AUC204L	Automotive Components and Assembly drawing	Н	L	Н	L	М	L	L	М	Н	Н	L	Н	Н	Н	Н
18AUC301J	Automotive Engines	Н	Н	М	М	М	L	М	L	М	Н	L	Н	Н	Н	Н
18AUC302J	Vehicular Structures and Driveline Systems	Н	Н	М	М	М	L	М	L	М	Н	L	Н	Н	Н	Н
18AUC303J	Automotive Electrical and Electronic Systems	Н	Н	М	М	М	L	М	М	Н	М	М	Н	Н	Н	Н
18AUC304J	CAD Analysis for Automotive Engineers	Н	Н	Н	Н	L	L	L	L	М	Н	L	М	Н	Н	Μ
18AUC305T	Design of Automotive Components	Н	Н	Н	Н	М	L	L	-L	М	М	L	М	Н	Н	М
18AUC401J	Vehicle Dynamics	Н	Н	Н	Н	Н	М	М	М	Н	М	М	М	Н	Н	Н
18AUC402L	Vehicle Testing Laboratory	Н	Н	Н	Н	Н	М	М	М	Н	М	М	М	Н	Н	Н
18AUE321T	Automotive Components Manufacturing	Н	Н	М	Н	Н	L	М	Н	Н	М	М	Н	Н	Н	М
18AUE322T	Welding & Joining Technique	Н	М	L	L	Н	L	М	М	М	L	L	Н	Н	Н	М
18AUE323T	Automotive Surface Engineering	Н	М	М	М	Н	L	М	М	М	М	L	М	Н	Н	М
18AUE324T	Agile Manufacturing	Н	Н	L	Н	Н	М	Н	М	Н	Н	Н	Н	Н	Н	М
18AUE325T	Manufacturing systems and simulation	Н	Н	М	М	Н	М	Н	М	М	М	М	Н	Н	Н	М
18AUE326T	Composite Materials and Structures	Н	Н	Н	Н	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н
18AUE327T	Metrology and Measurements	Н	Н	Н	Н	Н	Н	Н	М	М	М	L	Н	Н	Н	Н
18AUE421T	Advanced Manufacturing Process	Н	М	М	L	Н	L	Н	М	М	М	М	Н	Н	Н	Μ
18AUE422T	Computer Integrated Manufacturing	Н	Н	Н	М	Н	L	Н	М	М	Н	Н	Н	Н	Н	М
18AUE423T	Process Planning & Cost Estimation	Н	Н	М	L	Н	L	Н	М	М	М	М	Н	Н	Н	М
18AUE424T	Automotive Quality Systems	Н	L	L	М	М	L	М	М	М	М	Н	Н	Н	Н	Μ
18AUE425T	Industrial Engineering & Operational Research	Н	Н	Н	М	Н	L	М	М	Н	Н	Н	Н	Н	Н	М
18AUE331T	Heat ventilation and air conditioning	Н	Н	Н	М	Н	L	М	М	Н	Н	Н	Н	Н	Н	М
18AUE332T	Engine testing and validation	Н	Н	М	Н	М	М	М	М	М	М	L	Н	Н	Н	М
18AUE333T	Fuel testing and standards	Н	М	L	М	L	М	М	М	L	М	L	М	Н	Н	Μ
18AUE334T	Automotive exhaust system development	Н	Н	Н	М	М	М	Н	М	М	М	М	Н	Н	Н	М
18AUE335T	Engine auxiliary systems	Н	Н	М	М	М	М	М	М	М	М	М	L	Н	Н	Μ
18AUE431T	Design of automotive thermal system	Н	Н	М	М	L	М	М	М	М	М	М	М	Н	Н	Μ
18AUE432T	Simulation of Internal Combustion engines	Н	Н	М	Н	М	L	М	М	М	М	L	М	Н	Н	М
18AUE433T	Automotive emission formation and controls	Н	Н	М	Н	М	L	М	М	М	М	L	М	Н	Н	Μ
18AUE434T	Alternative fuels and energy systems	Н	М	М	Н	L	Н	Н	М	L	М	L	Н	Н	Н	Μ
18AUE341T	Automotive Driveline Design	Н	Н	Н	Н	М	L	М	L	М	М	Н	М	Н	Н	М
18AUE342T	Automotive Chassis Component Design	Н	Н	Н	Н	М	L	L	L	М	М	L	М	Н	Н	М
18AUE344T	Concepts of Engineering Design	Н	Н	Н	Н	М	М	М	L	М	М	М	Н	Н	Н	М

18AUE345T	Rapid prototyping and tooling	М	М	Н	Н	М	М	М	М	Н	Н	М	М	Н	Н	М
18AUE346T	Modeling and Control of Vibration in Mechanical Systems	Н	Н	М	Н	М	L	L	L	Н	М	М	М	Н	Н	М
18AUE347T	Geometrical Dimensioning and Tolerance	Н	Н	Н	Н	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н
18AUE348T	Design for Manufacture	Н	Н	Н	Н	Н	Н	Н	М	М	М	L	Н	Н	Н	Н
18AUE441T	Optimization techniques in Engineering Design	Н	Н	Н	Н	Н	Н	L	Н	Н	М	Н	Н	Н	Н	М
18AUE442T	Multi-body Dynamics	Н	Н	Н	Н	Н	L	L	М	Н	Н	М	М	Н	Н	М
18AUE443T	Finite Element Analysis	Н	Н	Н	Н	Н	L	L	М	Н	Н	М	М	Н	Н	М
18AUE444T	Design of Experiments	Н	Н	Н	Н	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н
18AUE445T	Product Life Cycle Management	Н	Н	Н	Н	Н	Н	Н	М	М	М	L	Н	Н	Н	Н
18AUE351T	Auxiliary vehicle systems	Н	М	L	М	Н	М	М	М	М	М	М	Н	Н	Н	М
18AUE352T	Two and three wheeler technology	Н	Н	Н	Н	М	М	М	М	М	М	L	Н	Н	Н	Н
18AUE353T	Vehicle performance and testing	Н	Н	Н	Н	Н	М	Н	М	М	М	L	Н	Н	Н	Н
18AUE354T	Tyre technology	Н	Н	Н	М	М	L	Н	М	М	М	L	Н	Н	М	М
18AUE355T	Motorsport technology	Н	Н	Н	Н	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н
18AUE356T	Automotive NVH	Н	Н	Н	Н	Н	Н	Н	М	М	М	L	Н	Н	Н	Н
18AUE451T	Advanced vehicle technology	Н	Н	Н	Н	Н	М	Н	М	М	М	L	Н	Н	М	Н
18AUE452T	Automotive safety and ergonomics	Н	Н	Н	Н	Н	Н	Н	Н	М	М	L	Н	Н	Н	Н
18AUE453T	Vehicle maintenance	Н	Н	М	М	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н
18AUE454T	Vehicle body engineering and Aerodynamics	Н	Н	Н	Н	Н	М	Н	М	М	М	L	Н	Н	Н	Н
18AUE455T	Machine Learning Approach for Automotive Applications	Н	Н	Н	Н	Н	Н	L	Н	Н	М	Н	Н	Н	Н	М
18AUE202T	Sensors, Actuators and Signal Conditioners	Н	Н	Н	Н	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н
18AUE317J	Automotive Control Engineering	Н	Н	Н	Н	Н	Н	Н	М	М	М	L	Н	Н	Н	Н
18AUO101T	Hybrid and Electric Vehicles	Н	Н	Н	Н	М	М	М	М	М	М	L	М	Н	М	Н
18AUO102T	Renewable Sources of Energy	Н	М	Н	Н	М	L	Н	М	М	М	L	Н	Н	Н	М
18AUO103T	Special Type of Vehicles	Н	Н	Н	Н	М	М	М	М	М	М	L	М	Н	М	Н
18AUO104T	Fuel Cells and Applications	Н	М	Н	Н	М	L	Н	М	М	М	L	Н	Н	Н	М
18AUO105T	Transport Management	Н	Н	Н	Н	М	М	М	М	М	М	L	М	Н	М	Н
18AUO106T	Composite Materials for Automotive Applications	Н	М	Н	Н	М	L	Н	М	М	М	L	Н	Н	Н	Μ
18AUO107T	Non Destructive Testing and evaluation	Н	Н	Н	Н	М	М	М	М	М	М	L	М	Н	М	Н
18AUO108T	Advanced engine technology	Н	М	Н	Н	М	L	Н	М	М	М	L	Н	Н	Н	М
18AUO109T	New Product Development	Н	Н	Н	Н	М	М	М	М	М	М	L	М	Н	М	Н
18AUO110T	Automotive standards and regulations	Н	Н	Н	Н	Н	М	Н	М	Н	М	М	Н	Н	М	Н
18AUO111T	Automotive Sciences	Н	Н	Н	Н	Н	М	Н	М	Н	М	Μ	Н	Н	М	Н
18AUO112T	Intelligent Vehicle Technology	Н	L	L	L	Н	Н	Н	Н	M	М	М	М	M	М	М
18AUP101L	Massive Open Online Course - I	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
18AUP102L	Industrial Training-I	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
18AUP103L	Seminar - I	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н	Н	Н	М	М
18AUP104L	Massive Open Online Course - II	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
18AUP105L	Industrial Training-II	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н	Н	Н	М	М
18AUP106L	Seminar - II	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н	Н	Н	М	М
18AUP107L	Minor Project	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
18AUP108L	Internship (4-6 weeks)	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
18AUP109L	Project	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
18AUP110L	Semester Internship	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
	Program Average	Н	Н	Н	М	Н	Н	Н	М	Н	М	М	Н	Н	Н	М

H – High Correlation, M – Medium Correlation, L – Low Correlation

2. (g) Implementation Plan: B.Tech. in Automobile Engineering

18MAB101T Ca 18CYB101J Ch 18CSS101J Pr 18EES102L Eli	Programming for Problem Solving Electrical and Electronics Eng. Workshop Professional Skills and Practices Value Education NSS	Hou L 2 3 3 3 1	T 0 1 1 0	P 2 0 2	C 3 4	Code	Semester - II Course Title	Hou	rs/ W	/eek	С
18LEH10XJ CF 18MAB101T Cc 18CYB101J CF 18CSS101J PF 18ESS102L EF 18PDM101L PF 18LEM102J Vc 18GNM102L NS 18GNM103L NO	Chinese / French / German / Japanese/ Korean Calculus and Linear Algebra Chemistry Programming for Problem Solving Electrical and Electronics Eng. Workshop Professional Skills and Practices Value Education VSS	2 3 3 3	0 1 1	0	3		Course Title	Hou	_		\cap
18MAB101T C2 18CYB101J CF 18CSS101J Pr 18EES102L EI 18PDM101L Pr 18LEM102J V2 18GNM102L NS 18GNM103L NO	Calculus and Linear Algebra Chemistry Programming for Problem Solving Electrical and Electronics Eng. Workshop Professional Skills and Practices Value Education VSS	3 3 1	1	0		401 514041		L			U
18CYB101J CH 18CSS101J Pr 18EES102L EN 18PDM101L Pr 18LEM102J Va 18GNM102L NS 18GNM103L NG	Chemistry Programming for Problem Solving Electrical and Electronics Eng. Workshop Professional Skills and Practices Value Education VSS	3 1	1			III 181 FH 101.1	English	2	0	2	3
18CSS101J Pr 18EES102L El 18PDM101L Pr 18LEM102J Va 18GNM102L NS 18GNM103L NO	Programming for Problem Solving Electrical and Electronics Eng. Workshop Professional Skills and Practices Value Education NSS	3			5		Advanced Calculus and Complex Analysis	3	1	0	4
18EES102L EI 18PDM101L Pr 18LEM102J Va 18GNM102L NS 18GNM103L NO	Electrical and Electronics Eng. Workshop Professional Skills and Practices Value Education NSS	1		4	5	18PYB101J	Physics: Electromagnetic Theory, Quantum	3	1	2	5
18LEM102J Vá 18GNM102L NS 18GNM103L NO	Value Education VSS	0	0	4	3		Mechanics, Waves and Optics				
18GNM102L NS 18GNM103L NO	VSS	-	0	2	0		Engineering Graphics and Design	1	0	4	3
18GNM103L N		1	0	1	0		Basic Civil and Mechanical Engineering Artifact Dissection Laboratory	3	0	2	5 1
							General Aptitude	0	0	2	1
TOGNWTU4L IV		0	0	2	0		Constitution of India	1	0	0	0
	Total Learning Credits				20		Physical and Mental Health using Yoga	0	0	2	0
	Total Ecalining Orealis				20	<u> </u>	Total Learning Credits	;			22
	Semester - III					1	Semester - IV				
		Ноп	ire/V	Veek		-		Ног	rs/ W	look	
Code	Course Title	L	T	P	С	Code	Course Title	I	T	Р	С
18MAB201T Tr	Transforms and Boundary Value Problems	3	1	0	4	18MAB202T	Numerical Methods for Engineers	3	1	0	4
	Engineering Mechanics	3	1	0	4	18BTB101T	Biology	2	0	0	2
18MEC101T Th	Thermodynamics	3	1	0	4	18AUC203T	Applied Thermal Engineering for Automotive	3	1	0	4
18AUC2011 Ma	Manufacturing Technology for Automotive	3	0	2	4		Engineers			-	
Er	Engineers						Mechanics of Solids	3	1	0	4
	Automotive Components and Assembly drawing	0	0	4	2		Fluid Mechanics	3	1	0	4
	Social Engineering	2	0	0	2		Fluid Dynamics Laboratory	0	0	2	1
	Competencies in Social Skills	0	0	2	0		Strength of Materials Laboratory	0	0	2	1
	Entrepreneurial Skill Development Environmental Science	1	0	0	0		Management Principles for Engineers Critical and Creative Thinking Skills	2	0	0	2
IOCTIVITOTT EI	Total Learning Credits	ı	U	U	<i>0</i>		Business Basics for Entrepreneurs	0	0	2	0
	Total Learning Credits				20	TOF DIVIZO4L	Total Learning Credits				22
				ì	H	11.4					
	Semester - V				1		Semester - VI	1			
Code	Course Title	Hou	irs/ v	Veek P	С	Code	Course Title	Hou	rs/ W	Р	С
18ALIC301 I Ai	Automotive Engines	3	0	2	4	18ALIC302 I	Vehicular Structures and Driveline systems	3	0	2	4
	Machines and Mechanisms	3	1	0	4		Automotive Electrical and Electronic Systems	3	0	2	4
	Materials Technology	3	0	0	3		CAD Analysis for Automotive Engineers	3	0	2	4
	Materials Technology Laboratory	0	0	2	1		Design of Automotive Components	3	0	0	3
	Professional Elective – 1	3	0	0	3		Comprehension	0	1	0	1
	Professional Elective – 2	3	0	0	3		Professional Elective – 3	3	0	0	3
	Open Elective – 1	3	0	0	3		Open Elective – 2	3	0	0	3
	Massive Open Online Course - I						Massive Open Online Course - II				
	ndustrial Training-I	0	0	2	1		Industrial Training-II	0	0	2	1
18AUP103L Se							Seminar - II	_	_	•	
	Analytical and Logical Thinking Skills Entrepreneurship Management	0	0	2	0		Employability Skills and Practices	0	0	2	1
18PDM302L Er 18LEM110L Inc		0	0	2	0	18LEM1091	Indian Traditional Knowledge	•	0	0	0 24
TOLEWITTOL III	Total Learning Credits	U	U		22	77777	Total Learning Credits				
	171177-11		1	H	4	W. FF	· FAMI				
	Semester - VII						Semester - VIII				
Code	Course Title			Veek	С	Code	Course Title	_	rs/ V		С
		L	T	Р	_			L	T	Р	
	Vehicle Dynamics	3	0	2	4	18AUP109L		0	0	20	10
	Vehicle Testing laboratory Professional Elective – 4	0	0	2	1	18AUP110L	Semester Internship				
	Professional Elective – 4 Professional Elective – 5	3	0	0	3						ı
	Professional Elective – 5 Professional Elective – 6	3	0	0	3						ı
	Professional Elective – 6 Open Elective – 3	3	0	0	3						ı
18AUP107L Mi	,						Total Learning Credits		l——		10
	nternship (4-6 weeks)	0	0	6	3		rotal Learning Credits				- 10
TOTOL TOOL III	Total Learning Credits				20	1					