



ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

M.Tech. Scheme of Examination & Syllabus 2026-27

AUTOMOTIVE TECHNOLOGY

SEMESTER I

Sr No.	Course Category	CourseCode	Course Title	Hours per Week			Credits	Maximum Marks			Min Passing marks	No. of Hrs for ESE
				L	T	P		Continual Assessment	End Sem Examination	Total		
1.	PCC	26AT101T	Automotive Mechanical Systems	4	-	-	4	40	60	100	50	3
2.	PCC	26AT101P	Automotive Mechanical Systems Lab	-	-	2	1	25	25	50	25	-
3.	PCC	26AT102T	Automotive Electrical and Electronics Systems	4	-	-	4	40	60	100	50	3
4.	PCC	26AT102P	Internal Combustion Engines Lab	-	-	2	1	25	25	50	25	-
5.	PCC	26AT103T	Vehicle Dynamics	4	-	-	4	40	60	100	50	3
6.	PEC	26AT104T	Program Elective-I	4	-	-	4	40	60	100	50	3
7.	PEC	26AT105T	Program Elective-II	4	-	-	4	40	60	100	50	3
8.	CEP	26AT106P	Technical Seminar & Research paper Writing	-	-	2	1	50	-	50	25	-
Total				20	0	06	23	300	350	650		

		July 2026	1.0	Applicable for 2026-27
Chairman - BoS	Dean - Academics	Date of Release	Version	



Basket for Program Elective – I Courses

Semester	Course Category	Course Code	Name of Course	Credits
I	PEC	26AT104T(i)	Automotive Fuels & Emissions	4
I	PEC	26AT104T(ii)	Machinery Fault diagnosis	4
I	PEC	26AT104T(iii)	Vehicle and Engine Testing	4

Basket for Program Elective – II Courses

Semester	Course Category	Course Code	Name of Course	Credits
I	PEC	26AT105T (i)	Advanced Materials Engineering	4
I	PEC	26AT105T (ii)	Artificial Intelligence in Automobiles	4
I	PEC	26AT105T (iii)	Noise, Vibration & Harshness	4

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SEMESTER II

Sr No.	Course Category	Course Code	Course Title	Hours Per Week			Credits	Maximum Marks			Min Passing marks	No. of Hrs for ESE
				L	T	P		Continual Assessment	End Sem Examination	Total		
1.	PCC	26AT201T	Finite Element Methods and Analysis	4	-	-	4	40	60	100	50	3
2.	PCC	26AT201P	Finite Element Methods and Analysis Lab	-	-	2	1	25	25	50	25	-
3.	PCC	26AT202T	Fuel Cell Technology	4	-	-	4	40	60	100	50	3
4.	PCC	26AT203T	Electric Vehicles	4	-	-	4	40	60	100	50	3
5.	PCC	26AT203P	Electric Vehicles Lab	-	-	2	1	25	25	50	25	-
6.	PEC	26AT204T	Program Elective – III	4	-	-	4	40	60	100	50	3
7.	PEC	26AT205T	Program Elective – IV	4	-	-	4	40	60	100	50	3
8.	CEP	26AT206P	IPR/ Quantitative Methods/ Design of Experiments	-	-	2	1	50	-	50	25	-
Total				20	0	06	23	300	350	650	-	-

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Basket for Program Elective – III Courses

II	PEC	26AT204T(i)	Automotive Safety Systems	4
II	PEC	26AT204T(ii)	Automotive Testing and Validation	4
II	PEC	26AT204T(iii)	Data Science and Analytics	4

Basket for Program Elective – IV Courses

II	PEC	26AT205T(i)	Design of Battery Pack and Thermal Modelling	4
II	PEC	26AT205T(ii)	Automotive Tribology and Maintenance	4
II	PEC	26AT205T(iii)	Vehicle body Engineering	4

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SEMESTER III

Sr No.	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks			Min Passing marks	No. of Hrs for ESE
				L	T	P		Continual Assessment	End Sem Examination	Total		
1.	PROJ	26AT301P	Dissertation Phase-I / Internship	-	-	36	18	300	100	400	200	3
Total				-	-	36	18	300	100	400		

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SEMESTER IV

Sr No.	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks			Min Passing marks	No. of Hrs for ESE
				L	T	P		Continual Assessment	End Sem Examination	Total		
1.	PROJ	26AT401P	Dissertation Phase-II / Internship	-	-	32	16	300	100	400	200	3
Total				-	-	32	16	300	100	400		

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