



HINDUSTAN

INSTITUTE OF TECHNOLOGY & SCIENCE
(DEEMED TO BE UNIVERSITY)

Diploma in Automobile Engineering (Duration: 3 Years)

**REGULATION 2024
(in line with NEP 2020)**

CURRICULUM

(Applicable for students admitted from 2024 onwards)

**DEPARTMENT OF AUTOMOBILE ENGINEERING
SCHOOL OF ENGINEERING AND TECHNOLOGY
HINDUSTAN INSTITUTE OF TECHNOLOGY AND SCIENCE**

CURRICULUM STRUCTURE

SEMESTER - I									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	I	HS	TH	Tamil Marabu	2	0	0	2	2
2	I	HS	TP	Communicative English -I	2	0	2	3	4
3	I	BS	TH	Applied Mathematics	2	1	2	4	5
4	I	BS	TP	Applied Physics	2	0	4	4	6
5	I	BS	TP	Applied Chemistry	2	0	4	4	6
6	I	PC	TP	Basic Workshop Skills	1	0	4	3	5
				TOTAL	11	1	16	20	28
L – Lecture T – Tutorial P – Practical C – Credit TCH – TotalContact Hours									

SEMESTER - II									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	II	HS	TH	Tamils and Technology	2	0	0	2	2
2	II	HS	TP	Communicative English - II	2	0	2	3	4
3	II	PC	TP	Basic Engineering Practices	1	0	4	3	5
4	II	PC	TP	Basics of Automobile Engineering	2	0	4	4	6
5	II	PC	TP	Technical Drawing	1	0	4	3	5
6	II	EEC	TP	Digital Workplace Skills	1	0	4	3	5
7	II	HS	TH	Universal Human Values	2	0	0	2	2
				TOTAL	11	0	18	20	29
L – Lecture T – Tutorial P – Practical C – Credit TCH – Total Contact Hours									

SEMESTER - III									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	III	PC	TP	Mechanics of Materials	2	1	2	4	5
2	III	PC	TP	Manufacturing Technology	3	0	2	4	5
3	III	PC	TP	Automotive Engines	3	0	2	4	5
4	III	PC	TP	Fluid Mechanics and Machines	2	1	2	4	5
5	III	PC	TP	Automobile Components Drawing	2	0	4	4	6
6	III	ES	TH	Environmental Science and Engineering	2	0	0	2	2
				TOTAL	14	2	12	22	28
L – Lecture T – Tutorial P – Practical C – Credit TCH – Total Contact Hours									

SEMESTER - IV									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	IV	PC	TP	Applied Thermal Engineering	2	1	2	4	5
2	IV	PC	TP	Automotive Transmission Systems	3	0	2	4	5
3	IV	PC	TP	Automotive Chassis	3	0	2	4	5
4	IV	DE	TP	Elective I	2	0	2	3	4
5	IV	DE	TP	Elective II	2	0	2	3	4
6	IV	PJ	P	Minor Project	0	0	4	2	4
				TOTAL	12	1	14	20	27
L – Lecture T – Tutorial P – Practical C – Credit TCH – Total Contact Hours									

SEMESTER - V									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	V	PC	TP	Automotive Electrical and Electronics Systems	3	0	2	4	5
2	V	PC	TP	Vehicle Body Engineering	3	0	2	4	5
3	V	DE	TP	Elective III	2	0	2	3	4
4	V	DE	TP	Elective IV	2	0	2	3	4
5	V	DE	TP	Elective V	2	0	2	3	4
6	V	PJ	P	Project Work Phase 1	0	0	4	2	4
7	V	EEC	P	Internship	0	0	-	1	NA
				TOTAL	12	0	14	20	26
L – Lecture T – Tutorial P – Practical C – Credit TCH – Total Contact Hours									

SEMESTER - VI									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	VI	PC	TP	Hybrid Electrical Vehicle Technology	3	0	2	4	5
2	VI	DE	TP	Elective -VI	2	0	2	3	4
3	VI	DE	TP	Elective-VII	2	0	2	3	4
4	VI	PJ	P	Project work Phase 2	0	0	16	8	16
				TOTAL	7	0	22	18	29

TOTAL CREDITS: (20+20+22+20+20+18) = 120 CREDITS

LIST OF DEPARTMENT ELECTIVES

DEPARTMENT ELECTIVE – I									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	IV	DE	TP	Two and Three wheeler Technology	2	0	2	3	4
2	IV	DE	TP	Smart Transport Instrumentation	2	0	2	3	4
3	IV	DE	TP	Clean Energy Technology	2	0	2	3	4

DEPARTMENT ELECTIVE – II									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	IV	DE	TP	Vehicle Maintenance	2	0	2	3	4
2	IV	DE	TP	Modern Transport Engineering	2	0	2	3	4
3	IV	DE	TP	New Product Design	2	0	2	3	4

DEPARTMENT ELECTIVE – III									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	V	DE	TP	Energy Storage Devices	2	0	2	3	4
2	V	DE	TP	Automotive Emission and Control	2	0	2	3	4
3	V	DE	TP	Computer Integrated Manufacturing	2	0	2	3	4

DEPARTMENT ELECTIVE – IV									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	V	DE	TP	Transport Management	2	0	2	3	4
2	V	DE	TP	Total Quality Management	2	0	2	3	4
3	V	DE	TP	Process Planning and Cost Estimation	2	0	2	3	4

DEPARTMENT ELECTIVE – V									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	V	DE	TP	Autotronics	2	0	2	3	4
2	V	DE	TP	Automotive System Design	2	0	2	3	4
3	V	DE	TP	Digital Manufacturing	2	0	2	3	4

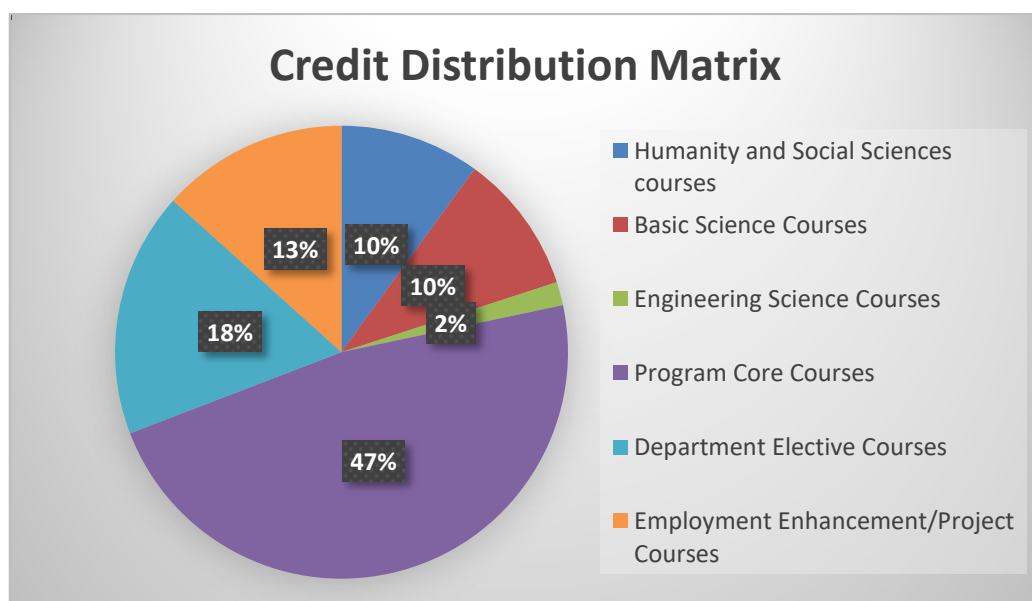
DEPARTMENT ELECTIVE – VI									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	VI	DE	TP	Power Electronics for EV	2	0	2	3	4
2	VI	DE	TP	Vehicle Security Systems	2	0	2	3	4
3	VI	DE	TP	Tractors and Farm Equipment	2	0	2	3	4

DEPARTMENT ELECTIVE –VII									
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	NAME OF THE COURSE	L	T	P	C	TCH
1	VI	DE	TP	Sensors and Actuators	2	0	2	3	4
2	VI	DE	TP	Automotive HVAC Systems	2	0	2	3	4
3	VI	DE	TP	Heavy Vehicle Engineering	2	0	2	3	4

Credit Distribution Matrix

	Humanity and Social Sciences courses	Basic Science Courses	Engineering Science Courses	Program Core Courses	Department Elective Courses	Employment Enhancement/Project Courses..	TOTAL
Sem 1	5	12		3			20
Sem 2	7			10		3	20
Sem 3			2	20			22
Sem 4				12	6	2	20
Sem 5				8	9	3	20
Sem 6				4	6	8	18
	12	12	2	57	21	16	120

Category	Credits
Humanity and Social Sciences courses	12
Basic Science Courses	12
Engineering Science Courses	2
Program Core Courses	57
Department Elective Courses	21
Employment Enhancement/Project Courses	16
	120



Diploma Coordinator
Dr.V.Nadanakumar

Academic Coordinator
Dr.V.Ramanathan

HOD/Automobile
Dr.M.Jaikumar

Dean (E&T)

I Q A C (Director)

Vice Chancellor