



REGULATIONS 2024

B. TECH. ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

CHOICE BASED CREDIT SYSTEM

CURRICULUM FOR I TO VIII SEMESTERS

SEMESTER I

S. NO	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDIT
				L	T	P		
1.		Induction Programme	-	-	-	-	-	0
THEORY								
2.	24EN1R001	Professional English – I	HSMC	2	0	2	4	3
3.	24MA1R001	Matrices and Calculus	BSC	3	1	0	4	4
4.	24CY1R001	Engineering Chemistry	BSC	3	0	0	3	3
5.	24GE1R001	Problem Solving and Programming in Python	ESC	3	0	0	3	3
6.	24BE1R001	Basic Electrical and Electronics Engineering	ESC	2	0	2	4	3
7.	24TA1R001	தமிழர் மரபு / Heritage of Tamils	HSMC	1	0	0	1	1
PRACTICALS								
8.	24CY1R002	Chemistry Laboratory	BSC	0	0	3	3	1.5
9.	24GE1R002	Programming in Python Laboratory	ESC	0	0	3	3	1.5
TOTAL				14	1	10	25	20

SEMESTER II

S. NO	COURSE CODE	COURSE TITLE	CATE- GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDIT
				L	T	P		
THEORY								
1.	24EN2R002	Professional English – II	HSMC	2	0	2	4	3
2.	24MA2R003	Statistics and Numerical Methods	BSC	3	1	0	4	4
3.	24PH1R001	Engineering Physics	BSC	3	0	0	3	3
4.	24GE2R005	Design Thinking	ESC	3	0	2	5	4
5.	24CS2R002	Object Oriented Programming using Java	PCC	3	0	0	3	3
6.	24TA2R002	தமிழரும் தொழில்நுட்பமும் / Tamils and Technology	HSMC	1	0	0	1	1
PRACTICALS								
7.	24PH1R003	Physics Laboratory	BSC	0	0	3	3	1.5
8.	24GE2R006	Basics of Civil and Mechanical Engineering Laboratory	ESC	0	0	3	3	1.5
9.	24CS2R004	Object Oriented Programming using Java Laboratory	PCC	0	0	3	3	1.5
TOTAL				15	1	13	29	22.5

SEMESTER III

S. NO	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDIT
				L	T	P		
THEORY								
1.	24MA3R004	Discrete Mathematics	BSC	3	1	0	4	4
2.	24CS3R005	Digital Principles and Computer Organization	ESC	3	0	2	5	4
3.	24AD3R001	Database Design and Management	PCC	3	0	0	3	3
4.	24AD3R002	Artificial Intelligence	PCC	3	0	0	3	3
5.	24AD3R003	Data Structures Design	PCC	3	0	0	3	3
6.	24AD3R004	Data Exploration and Visualization	PCC	3	0	2	5	4
PRACTICALS								
7.	24AD3R005	Database Design and Management Laboratory	PCC	0	0	3	3	1.5
8.	24AD3R006	Data Structures Design Laboratory	PCC	0	0	3	3	1.5
9.	24AD3R007	Artificial Intelligence Laboratory	PCC	0	0	3	3	1.5
10.	24PT3R001	Aptitude Training – I	EEC	0	0	1	1	0
TOTAL				18	1	14	33	25.5

SEMESTER IV

S. NO	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDIT
				L	T	P		
THEORY								
1.	24MA4R007	Probability and Statistics	BSC	3	1	0	4	4
2.	24AD4R008	Machine Learning	PCC	3	0	0	3	3
3.	24AD4R009	Fundamentals of Data Science and Analytics	PCC	3	0	0	3	3
4.	24AD4R010	Operating Systems	PCC	3	0	0	3	3
5.	24AD4R011	Data Communication and Computer Networks	PCC	3	0	2	5	4
6.	24AD4R012	Design and Analysis of Algorithms	PCC	3	0	0	3	3
7.	24GE4R008	Environmental Sciences and Sustainability	BSC	2	0	0	2	2
PRACTICALS								
8.	24AD4R013	Machine Learning Laboratory	PCC	0	0	3	3	1.5
9.	24AD4R014	Data Science and Analytics Laboratory	PCC	0	0	3	3	1.5
10.	24PT4R002	Aptitude Training – II	EEC	0	0	1	1	0
TOTAL				20	1	9	30	25

SEMESTER V

S. NO	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDIT
				L	T	P		
THEORY								
1.	24AD5R015	Data and Information Security	PCC	3	0	0	3	3
2.	24AD5R016	Cloud and Distributed Computing	PCC	3	0	0	3	3
3.	24AD5R017	Deep Learning	PCC	3	0	2	5	4
4.	24AD5R018	Pattern Recognition	PCC	3	0	2	5	4
5.		Professional Elective I	PEC	2	0	2	4	3
6.		Professional Elective II	PEC	2	0	2	4	3
7.		Open Elective–I	OEC	3	0	0	3	3
8.		Mandatory Course-I	MC	3	0	0	3	0
PRACTICALS								
9.	24AD5P001	Mini-Project	EEC	0	0	2	2	1
10.	24AD7I001	Internship -I	EEC	-	-	-	-	-
TOTAL				22	0	10	32	24

SEMESTER VI

S. NO	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDIT
				L	T	P		
THEORY								
1.	24AD6R019	Natural Language Processing	PCC	3	0	0	3	3
2.	24CS6R022	Embedded Systems and IoT	PCC	3	0	2	5	4
3.		Management Elective	HSMC	3	0	0	3	3
4.		Professional Elective III	PEC	2	0	2	4	3
5.		Professional Elective IV	PEC	2	0	2	4	3
6.		Open Elective–II	OEC	3	0	0	3	3
7.		Mandatory Course-II	AC	3	0	0	3	0
PRACTICALS								
8.	24AD6P002	Mini-Project	EEC	0	0	2	2	1
9.	24PT6R003	Competitive Coding Practice	EEC	1	0	0	1	1
10.	24AD7I001	Internship -II	EEC	-	-	-	-	-
TOTAL				20	0	8	28	21

SEMESTER VII

S. NO	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDIT
				L	T	P		
THEORY								
1.	24GE7R006	Human Values and Ethics	HSMC	2	0	0	2	2
2.		Professional Elective V	PEC	2	0	2	4	3
3.		Professional Elective VI	PEC	2	0	2	4	3
4.		Open Elective–III	OEC	3	0	0	3	3
5.		Open Elective–IV	OEC	3	0	0	3	3
PRACTICALS								
6.	24AD7P003	Project Phase-I	EEC	0	0	4	4	2
7.	24AD7I001	Internship -III	EEC	-	-	-	-	2
TOTAL				12	0	8	20	18

SEMESTER VIII

S. NO	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDIT
				L	T	P		
PRACTICALS								
1.	24AD8P004	Project Phase-II	EEC	0	0	16	16	8
TOTAL				0	0	16	16	8

S.NO	SUBJECT AREA	CREDITS PER SEMESTER								TOTAL CREDIT
		I	II	III	IV	V	VI	VII	VIII	
1	HSMC	4	4	-	-	-	3	2	-	13
2	BSC	8.5	8.5	4	6		-	-	-	27
3	ESC	7.5	5.5	4	-		-	-	-	17
4	PCC	-	4.5	17.5	19	14	7	-	-	62
5	PEC	-	-	-	-	6	6	6	-	18
6	OEC	-	-	-	-	3	3	6	-	12
7	EEC	-	-	-	-	1	2	4	8	15
8	NC/ Mandatory	-	-	-	-		-	-	-	0
TOTAL		20	22.5	25.5	25	24	21	18	8	164