NAVRACHANA UNIVERSITY | Accredited with Grade 'A' by NAAC

Program: Bachelor of Technology in Computer Science and Engineering
Batch 2025
School: School of Engineering and Technology

CORE (MANDATORY SUBJECTS) CREDITS	**126**	
CORE (DISCIPLINE ELECTIVE) CREDITS	**12**	
UNIVERSITY ELECTIVE CREDITS	**26**	
UNIVERSITY FOUNDATION PROG. CREDITS	**15**	**(Effective only from 2024)**
KHOJ CREDITS	**3**	
TOTAL PROGRAM CREDITS	**182**	

PROGRAM STRUCTURE 2025 BATCH

Sr. No.	Sem.	Course Code	Course Name	L	T	P	C
1	I		Linear Algebra and Calculus	2	0	2	3
2	I		Introduction to Computer Programming	3	0	0	3
3	I		Introduction to Computer programming Laboratory	0	0	4	2
4	I		Engineering Physics	2	0	0	2
5	I		Engineering Physics Laboratory	0	0	2	1
6	I		Introduction to Computers and Technology	2	1	0	3
7	I		University Elective				
			SEM 1 CORE (MANDATORY SUB) CREDITS				**14**
			SEM 1 UNI.ELECTIVE CREDITS				**4**
			SEM 1 UFP CREDITS				**4**
			SEM 1 CREDITS				**22**
			SEM 2				
Sr. No.	**Sem.**		**Course Name**	**L**	**T**	**P**	**C**
8	II		Problem Solving using Python	2	0	0	2
9	II		Problem Solving using Python Laboratory	0	0	4	2
10	II		Probability and Statistics	2	0	2	3
11	II		Web Technology	2	0	0	2
12	II		Web Technology Laboratory	0	0	2	1
13	II		Digital Logic Design	2	0	0	2
14	II		Digital Logic Design Laboratory	0	0	2	1
15	II		Engineering Graphics	1	0	2	2
16	II		University Elective				
			SEM 2 CORE (MANDATORY SUB) CREDITS				**15**
			SEM 2 UNI.ELECTIVE CREDITS				**4**
			SEM 2 UFP CREDITS				**4**
			SEM 2 CREDITS				**23**
			SEM 3				
21	III		Object Oriented Programming	2	0	0	2
22	III		Object Oriented Programming Laboratory	0	0	4	2
23	III		Computer Organization and Architecture	2	1	0	3
24	III		Discrete Mathematics	3	0	0	3

25	III		Data Structures	3	0	0	3
26	III		Data Structures Laboratory	0	0	2	1
27	III		Operating Systems	2	1	0	3
28	III		Operating Systems Labortory	0	0	2	1
29	III		University Elective				
			SEM 3 CORE (MANDATORY SUB) CREDITS				**18**
			SEM 3 UNI.ELECTIVE CREDITS				**4**
			SEM 3 CREDITS				**22**
			SEM 4				
Sr. No.	**Sem.**		**Course Name**	**L**	**T**	**P**	**C**
30	IV		Computer Networking	2	1	0	3
31	IV		Computer Networking Laboratory	0	0	2	1
32	IV		Database Management System	3	0	0	3
33	IV		Database Management System Laboratory	0	0	2	1
34	IV		Introduction to Microprocessor and Microcontroller	3	0	0	3
35	IV		Introduction to Microprocessor and Microcontroller Laboratory	0	0	2	1
36	IV		Design and Analysis of Algorithms	2	1	0	3
37	IV		Design and Analysis of Algorithms Labortory	0	0	2	1
38	IV		University Elective				
			SEM 4 CORE (MANDATORY SUB) CREDITS				**16**
			SEM 4 UNI.ELECTIVE CREDITS				**4**
			SEM 4 CREDITS				**20**
			SEM 5				
42	V		Mobile Application Development	2	0	0	2
43	V		Mobile Application Development Laboratory	0	0	2	1
44	V		Information Security	2	0	0	2
45	V		Software Engineering	3	0	0	3
46	V		Software Engineering Laboratory	0	0	2	1
47	V		Theory of Computation	2	1	0	3
48	V		Minor Project – I	0	0	6	3
49	V		Discipine Elective-1	2	1	0	3
50	V		Discipine Elective-1 Lab	0	0	2	1
51	V		University Elective				4
			SEM 5 CORE (MANDATORY SUB) CREDITS				**15**
			SEM 5 CORE (DISCIPLINE ELECT. SUB) CREDITS				**4**
			SEM 5 UNI.ELECTIVE CREDITS				**4**
			SEM 5 CREDITS				**23**
			Discipline Elective-1				
	V		Computer Graphics and Image Processing Advanced Web Technology Internet of Things	2	1	0	3
			Discipline Elective-1 Lab				
	V		Computer Graphics and Image Processing Laboratory Advanced Web Technology Laboratory Internet of Things Laboratory	0	0	2	1
			SEM 6				
52	VI		Big Data Analytics and Data Visualization	3	0	0	3
53	VI		Big Data Analytics and Data Visualization Laboratory	0	0	2	1

54	VI		Compiler Design	2	0	0	2
55	VI		Compiler Design Laboratory	0	0	2	1
56	VI		Artificial Intelligence	3	0	0	3
57	VI		Artificial Intelligence Laboratory	0	0	2	1
58	VI		Research Methodoloy	2	0	2	3
59	VI		Minor Project - II	0	0	6	3
60	VI		Discipine Elective-II	2	0	0	2
61	VI		Discipine Elective-II Lab	0	0	2	1
62	VI		University Elective				4
			SEM 6 CORE (MANDATORY SUB) CREDITS				**17**
			SEM 6 CORE (DISCIPLINE ELECT. SUB) CREDITS				**3**
			SEM 6 UNI.ELECTIVE CREDITS				**4**
			SEM 6 CREDITS				**24**
			Discipline Elective-II				
60	VI		Cyber Security Cloud Computing Computer Vision I	2	0	0	2
			Discipline Elective-II Lab				
61	VI		Cyber Security Laboratory Cloud Computing Laboratory Computer Vision I Laboratory	0	0	2	1
			SEM 7				
63	VII		Entrepreneurship	3	0	0	3
64	VII		Major Project - I	0	0	6	3
65	VII		Data Science and Machine Learning	3	0	0	3
66	VII		Data Science and Machine Learning Laboratory	0	0	2	1
67	VII		Deep Learning	2	0	0	2
68			Deep Learning Laboratory	0	0	2	1
69	VII		Discipline Elective-3	2	0	0	2
70	VII		Discipline Elective-3 Laboratory	0	0	2	1
71	VII		Discipline Elective-4	2	0	0	2
72	VII		KHOJ	3	0	0	3
73	VII		University Elective				2
			SEM 7 CORE (MANDATORY SUB) CREDITS				**13**
			SEM 7 CORE (DISCIPLINE ELECT. SUB) CREDITS				**5**
			SEM 7 UNI.ELECTIVE CREDITS				**2**
			SEM 7 KHOJ CREDITS				**3**
			SEM 7 CREDITS				**23**
			Discipline Elective-3				
69a	VII		Agentic AI (AI Track)	2	0	0	2
69b	VII		Natural Language Processing (AI Track)	2	0	0	2
69c	VII		Software Project Management (SPM Track)	2	0	0	2
69d	VII		Agile and Scrum Methodology (SPM Track)	2	0	0	2
			Discipline Elective-3 Laboratory				
70a	VII		Agentic AI Lab (AI Track)	0	0	2	1
70b	VII		Natural Language Processing Lab (AI Track)	0	0	2	1
70c	VII		Software Project Management Lab (SPM Track)	0	0	2	1
70d	VII		Agile and Scrum Methodology Lab (SPM Track)	0	0	2	1

			Discipline Elective-4				
71 a	VII		AI in Helathcare	2	0	0	2
71 b	VII		AIoT	2	0	0	2
71 c	VII		DevOps	2	0	0	2
71 d	VII		Software Quality Assurance and Testing	2	0	0	2
			SEM 8				
73	VIII		Internship	0	0	24	12
74	VIII		Major Project II	0	0	12	6
			SEM 8 (MANDATORY SUB) CREDITS				**18**