



AMRITA | **Online**
VISHWA VIDYAPEETHAM

PROGRAM

Bachelor of Computer Applications

(BCA -Online)

CURRICULUM

2025

CURRICULUM

	Course Code	Course Title	L T P	Cr
SEMESTER 1				
1	25ENG101A	Communicative English	2 0 2	3
2	25MAT102A	Foundations of Applied Mathematics - I	3 0 0	3
3	25CSA101A	Principles of Management	3 1 0	4
4	25CSA102A	Computer Essentials	3 0 2	4
5	25CSA103A	Problem Solving and Algorithmic Thinking	3 0 2	4
		TOTAL		18

	Course Code	Course Title	L T P	Cr
SEMESTER 2				
1	25ENG111A	Professional Communication	1 0 2	2
2	25MAT112A	Foundations of Applied Mathematics - II	3 0 0	3
3	25CSA111A	Operating System and Computer Architecture	3 1 0	4
4	25CSA112A	Object Oriented Programming using Java	3 1 0	4
5	25CSA113A	Database Management System	3 1 0	4
6	25CSA181A	Database Management System Lab	0 0 2	1
7	25CSA182A	Object Oriented Programming using Java Lab	0 0 2	1
		TOTAL		19

	Course Code	Course Title	L T P	Cr
SEMESTER 3				
1	25CSA201A	Data Structures and Algorithms	3 1 0	4
2	25CSA202A	Computer Networks	3 0 2	4
3	25ENV200A	Environmental Science and Sustainability	3 0 0	3
4		Stream Core - Mathematics	3 1 0	4
5		Professional Elective I	2 0 2	3
6		Professional Elective II	2 0 2	3
7	25CSA281A	Data Structures and Algorithms Lab	0 0 2	1
		TOTAL		22

	Course Code	Course Title	L T P	Cr
SEMESTER 4				
1	25SSK211A	Soft Skills	2 0 0	2
2	25CSA211A	Web Application Development	3 1 0	4
3	25CSA212A	Data Mining	3 0 2	4
4	25CSA213A	Software Engineering	3 1 0	4
5		Professional Elective III	2 0 2	3
6		Professional Elective IV	2 0 2	3
7	25CSA282A	Web Application Development -Lab	0 0 2	1
		TOTAL		21

	Course Code	Course Title	L T P	Cr
SEMESTER 5				
1	25CSA301A	C# and .NET Framework	3 0 2	4
2	25CSA302A	Foundations of Machine Learning	3 0 2	4
3	25CSA303A	Essentials of Cyber Security	3 0 0	3
4		Professional Elective V	2 0 2	3
5		Professional Elective VI	2 0 2	3
6	25CSA398A	Case Study		3
		TOTAL		20

Sl No	Course Code	Course Title	L T P	Cr
SEMESTER 6				
1	25CSA399A	Capstone Project		10
2	25CSA311A	Mobile Application Development	3 0 2	4
3		Professional Elective VII	2 0 2	3
4		Professional Elective VIII	2 0 2	3
		TOTAL		20
Total Credits 18+19+22+21+20+20= 120				

Sl No	Course Code	Course Title	L T P	Cr
Stream Core - Mathematics				
1	25MAT231A	Discrete Mathematics	3 1 0	4
2	25MAT232A	Linear Algebra for Data Science	3 1 0	4

Professional Electives - Regular Stream

SI No.	Course Code	Subject	L_T_P	Cr
1	25CSA331A	Advanced Programming in Python	2 0 2	3
2	25CSA332A	Digital Image processing	2 0 2	3
3	25CSA333A	Cloud Computing Foundation	2 0 2	3
4	25CSA334A	Switching, Routing and Wireless Essentials	2 0 2	3
5	25CSA335A	Computational Biology	2 0 2	3
6	25CSA336A	Business Analytics	2 0 2	3
7	25CSA337A	Advanced Java and J2EE	2 0 2	3
8	25CSA338A	Enterprise Networking, Security and Automation	2 0 2	3
9	25CSA339A	Block chain Technologies	2 0 2	3
10	25CSA340A	Introduction to VR Programming	2 0 2	3
11	25CSA341A	Distributed Systems	2 0 2	3
12	25CSA342A	Introduction to IOT	2 0 2	3

Professional Electives - AI and DS Stream

SI No.	Course Code	Subject	L_T_P	Cr
1	25CSA351A	Cloud Computing Foundation	2 0 2	3
2	25CSA352A	Exploratory Data Analysis using Python	2 0 2	3
3	25CSA353A	Big Data Analytics and Visualization	2 0 2	3
4	25CSA354A	Business Analytics	2 0 2	3
5	25CSA355A	Data Analysis using Microsoft Excel	2 0 2	3
6	25CSA356A	Data Governance	2 0 2	3
7	25CSA357A	Natural Language Processing	2 0 2	3
8	25CSA358A	Data Visualization using Power BI	2 0 2	3
9	25CSA359A	Text Mining and Analytics	2 0 2	3
10	25CSA360A	Applications of Machine Learning	2 0 2	3
11	25CSA361A	Tableau for Business Intelligence	2 0 2	3
12	25CSA362A	Artificial Neural Networks and Applications	2 0 2	3

* Any student completing 6 out of 8 of their electives from any particular stream will be given a certificate with that specialization name.