

Vishwakarma University (VU), Pune

**Master of Computer Applications (MCA)
2 Years – 4 Semesters Full Time Programme
Effective from AY 2024 – 2025**

**Programme Structure (NEP)
Choice Based Credit System (CBCS) and Grading System
Outcome-Based Education**

Semester I

Java Programming	
Python Programming - I	
Data Structures and Algorithms	
Advanced Software Engineering Principles	
Elective - 1	Data Privacy and Protection
Research Methodology	Applied Statistical Methods

Semester II

Adv. Java	
Data Analytics using Python	
Advanced DBMS	
Network and Cloud Technologies	
Elective - 2	Green Computing
Internship	Software Testing & Quality Assurance

Semester III

Mobile Application Development	
Data Warehousing & Data Mining	
Cloud Infrastructure and Services	
AI & ML	
Elective - 3	Tableau + Power BI
Project	Statistics Using R Programming

Semester IV

Android Application Development	
DevOps	
Big Data Analytics and Applications	
Internet of Things (IoT)	
Project	