

**U.P. TECHNICAL UNIVERSITY
LUCKNOW
Syllabus
MASTER OF COMPUTER APPLICATION**

I SEMESTER

MCA 111: Professional Communication
MCA 112: Accounting and Financial Management
MCA 113: Computer Concepts and Programming in C
MCA 114: Discrete Mathematics
MCA 115: Organizational Behaviour

PRACTICALS

MCA 151: Programming Lab
MCA 150: Language Lab
GP 101: General Proficiency

II SEMESTER

MCA 211: Environmental Science and Ethics
MCA 212: Computer Based Numerical & Statistical Techniques
MCA 213: Data Structures using C
MCA 214: Principles of Management
MCA 215: Computer Organization

PRACTICALS

MCA 251: Data Structures Lab
MCA 252: Computer Based Numerical and Statistical Techniques Lab
GP 201: General Proficiency

III SEMESTER

MCA 311 Operating Systems
MCA 312: Design & Analysis of Algorithms
MCA 313: Data base Management System
MCA 314: Internet & Java Programming
MCA 315: Computer Based Optimization Techniques

PRACTICALS

MCA 351: DBMS Lab
MCA 352: Java Programming Lab
GP 301: General Proficiency

IV SEMESTER

MCA 411 Management Information Systems
MCA 412: Object Oriented Systems
MCA 413: Fundamentals of E-Commerce
ELECTIVE- I
MCA 414: Computer Networks
MCA 415: Computer Based Optimization Techniques

PRACTICALS

MCA 451: Object Oriented Systems Lab
MCA 452: Mini Project
GP 401: General Proficiency

Code List of Elective-I

MCAE11 Compiler Design
MCAE12 Client Server Computing
MCAE13 Data Warehousing & Mining
MCAE14 Cryptography & Network Security
MCAE15 Theory of Automata & Formal Languages
MCAE16 Distributed system

V SEMESTER

MCA 511 WEB Technology
ELECTIVE-II
MCA 512: Dot Net Framework & C#
MCA 513: Software Engineering
ELECTIVE- III

PRACTICALS

MCA 551: WEB Technology Lab
MCA 552: Dot Net Lab
GP 501: General Proficiency

Code List of Elective-II

MCAE21 Computer Graphics & Animation
MCAE22 Simulation & Modeling
MCAE23 Advance Database Management Systems
MCAE24 Artificial Intelligence
MCAE25 Information Security & Cyber Laws
MCAE26 Information Storage & Management

Code List of Elective-III

MCAE31 ERP Systems

MCAE32 Software Project Management

MCAE33 Real Time Systems

MCAE34 Mobile Computing

MCAE35 Neural Networks

MCAE36 Pattern Recognition

VI SEMESTER

MCA 611: Colloquim

MCA 612: Project