# Master of Computer Applications (MCA)

# ONLINE DEGREE PROGRAM

| Course Key | Course | Credits |
|---|---|---|
| **I year First Semester** | | |
| DCA6101 | Fundamentals of Computer and IT | Bridge Course |
| DCA6102 | Programming in C | 4 |
| DCA6103 | Foundation of Mathematics | 4 |
| DCA6104 | Advanced Database Management System (DBMS) | 4 |
| DCA6105 | Computer Architecture | 4 |
| DCA6130 | Programming in C – Practical | 2 |
| DCA6131 | Advanced DBMS – Practical | 2 |
| **Second Semester** | | |
| DCA6201 | Operating System | 4 |
| DCA6202 | Advanced Data Structure | 4 |
| DCA6203 | Web Technologies | 4 |
| DCA6204 | Advanced Computer Networks | 4 |
| DCA6205 | Communication Skills | 2 |
| DCA6230 | Advanced Data Structures using C++ - Practical | 2 |
| DCA6231 | Web Technologies – Practical | 2 |
| **II Year Third Semester** | | |
| DCA7101 | Probability and Statistics | 4 |
| DCA7102 | Programming in Java | 4 |
| DCA7103 | Advanced Software Engineering | 4 |
| DCA7104 | Analysis and Design of Algorithm | 4 |
| DCA81xx | **Elective – I** | 4 |
| DCA8141 | Wireless and Mobile Communication | |
| DCA8142 | Open Source DB Systems | |
| DCA8143 | Cryptography and Network Security | |
| DCA7130 | Java Programming – Practical | 2 |
| DCA7131 | Seminar | 1 |
| **Fourth Semester** | | |
| DCA7230 | Project work | 24 |
| DCA82xx | **Elective – II** | 4 |
| DCA8241 | Advanced Web Programming | |
| DCA8242 | Cloud DB System | |
| DCA8243 | Storage Management | |
| **Total Credit** | | 93 |