

# CAREER POINT UNIVERISTY, KOTA

## School of Computer Application

Course : MCA

Duration: 2 Years (4 Semesters)

| Credit Requirement    |          |        |
|-----------------------|----------|--------|
|                       | Category | Credit |
| Humanities            | HU       | 5      |
| Departmental Core     | DC       | 90     |
| Departmental Elective | DE       | 28     |
| Total Credits         |          | 123    |

### Humanities

| Code    | Subject                           | L | T | P | Credit |
|---------|-----------------------------------|---|---|---|--------|
| HUL 219 | English Communication             | 2 | 0 | 2 | 3      |
| HUL 220 | Technical Communication Practices | 2 | 0 | 0 | 2      |
|         | Total                             |   |   |   | 5      |

### Departmental Core (DC)

| Departmental Core (DC)<br>Code | Subject                                            | L | T | P | Credit |
|--------------------------------|----------------------------------------------------|---|---|---|--------|
| CSL 107                        | Fundamentals Of Computers & Information Technology | 3 | 1 | 0 | 4      |
| CSL 106                        | PC Packages & PC Software Lab                      | 3 | 1 | 4 | 6      |
| CSL 103                        | Introduction to Programming with C                 | 3 | 1 | 4 | 6      |
| CSL 120                        | Programming in C                                   | 3 | 1 | 0 | 4      |
| CSL 716                        | Discrete Mathematics                               | 3 | 1 | 0 | 4      |
| CSL 761                        | Computer Organization and Architecture             | 3 | 1 | 0 | 4      |
| CSP 105                        | C Language LAB                                     | 0 | 0 | 4 | 2      |
| CSL 251                        | Internet & E-Commerce                              | 3 | 1 | 0 | 4      |
| CSL 221                        | Data Structures Using C                            | 3 | 1 | 2 | 5      |

|         |                                        |   |   |   |   |
|---------|----------------------------------------|---|---|---|---|
| CSL 232 | Desktop Applications With VB.Net       | 3 | 1 | 4 | 6 |
| CSL-278 | Database Management Systems            | 3 | 1 | 2 | 5 |
| CSL 630 | Data Structures and Algorithms         | 3 | 1 | 0 | 4 |
| CSL 305 | Database Management System             | 3 | 1 | 2 | 5 |
| CSL 306 | Principles of Programming Languages    | 3 | 1 | 0 | 4 |
| CSL 373 | Operating Systems                      | 3 | 1 | 0 | 4 |
| CSP 320 | Data Structures Lab                    | 0 | 0 | 4 | 2 |
| CSP 330 | OS Lab                                 | 0 | 0 | 4 | 2 |
| CSL-272 | Operating Systems                      | 3 | 1 | 0 | 4 |
| CSL 436 | Introduction to Software Engineering   | 3 | 1 | 0 | 4 |
| CSL-277 | Web Technology -1                      | 3 | 1 | 2 | 5 |
| CSL-274 | Object Orient Programming using C++    | 3 | 1 | 4 | 6 |
| CSD-282 | Minor Project                          | 0 | 0 | 4 | 2 |
| CSL-782 | Graphics and Multimedia                | 3 | 1 | 0 | 4 |
| CSL-740 | Software Engineering                   | 3 | 1 | 0 | 4 |
| CSL-753 | Advanced Database management system    | 3 | 1 | 2 | 5 |
| CSL 712 | Internet and Java Programming          | 3 | 1 | 0 | 4 |
| CSP 782 | Java Programming Lab                   | 0 | 0 | 4 | 2 |
| CSL-740 | Graphics & Multimedia Lab Using C++    | 0 | 0 | 4 | 2 |
| CSD-740 | Seminar - Research Paper               | 0 | 0 | 4 | 2 |
| CSL 261 | Computer Organization and Architecture | 3 | 1 | 0 | 4 |
| CSL 424 | Data Communication & Computer Networks | 3 | 1 | 0 | 4 |
| CSL 442 | Web Technology                         | 3 | 1 | 4 | 6 |
| CSL 436 | Introduction to Software Engineering   | 3 | 1 | 0 | 4 |
| CSL 432 | Programming in Java                    | 3 | 1 | 4 | 6 |

|                             |                                                    |   |   |   |        |          |                                       |   |   |   |   |
|-----------------------------|----------------------------------------------------|---|---|---|--------|----------|---------------------------------------|---|---|---|---|
| CSL 713                     | Programming with Python                            | 3 | 1 | 0 | 4      | CSL-651  | Modern Operating System               | 3 | 1 | 0 | 4 |
| CSL 424                     | Data Communication & Computer Networks             | 3 | 1 | 0 | 4      | CSL-652  | Linux System Administration           | 3 | 1 | 4 | 6 |
|                             |                                                    |   |   |   |        | CSL-605  | Advanced Java                         | 3 | 1 | 4 | 6 |
| CSL 786                     | Software Architecture, Testing & Quality Assurance | 3 | 1 | 0 | 4      | CSL-609  | Programming with Android              | 3 | 1 | 4 | 6 |
|                             |                                                    |   |   |   |        | CSL-273  | System Analysis & Design              | 3 | 1 | 0 | 4 |
| CSL 671                     | AI & Expert Systems                                | 3 | 1 | 0 | 4      | CSL-319  | Internet of Things                    | 3 | 1 | 2 | 5 |
| CSL 582                     | Visual Programming usnig .Net                      | 3 | 1 | 0 | 4      | CSL-546  | Information security & Cyber Law      | 3 | 1 | 0 | 4 |
| CSL-621                     | Analysis and Design of Algorithm                   | 3 | 0 | 0 | 3      | CSL-444  | Ethical Hacking                       | 3 | 1 | 0 | 4 |
|                             |                                                    |   |   |   |        | CSL778   | Cyber Crime and Digital Forensics     | 3 | 1 | 2 | 5 |
| CSP 783                     | Python Programming Lab                             | 0 | 0 | 4 | 2      | CSL-553  | Open Source Technologies              | 3 | 1 | 0 | 4 |
| CSP 784                     | Visual Programming Lab                             | 0 | 0 | 4 | 2      | CSL-653  | Database Administration using ORACLE  | 3 | 1 | 4 | 6 |
| CSD 850                     | Minor project in java/.Net                         | 0 | 0 | 4 | 2      | CSL-556  | Hardware Trouble Shuting & Networking | 3 | 1 | 4 | 6 |
| CSL-583                     | Computer Graphics & Multimedia                     | 3 | 1 | 4 | 6      | CSL-547  | Mobile Computing                      | 3 | 1 | 0 | 4 |
| CSL-548                     | .Net Programming using VB.net                      | 3 | 1 | 4 | 6      | CSL656   | Human Computer Interaction            | 3 | 1 | 0 | 4 |
| CSD-549                     | Colloquim                                          | 0 | 0 | 4 | 4      | CSL-705  | Theory of computation                 | 3 | 1 | 0 | 4 |
| CSL-874                     | Advanced Java programming                          | 3 | 1 | 0 | 4      | CSL-771  | Cloud Computing                       | 4 | 0 | 0 | 4 |
| CSL-875                     | Web Technologies with PHP                          | 3 | 1 | 0 | 4      | CSL -752 | Principles of Compiler Design         | 3 | 1 | 0 | 4 |
| CSL-759                     | Cryptography and Computer Security                 | 3 | 1 | 0 | 4      | CSL -770 | E-Commerce                            | 4 | 0 | 0 | 4 |
| CSP-876                     | Advanced Java Lab                                  | 0 | 0 | 4 | 2      | CSL-449  | Software Quality Management           | 3 | 1 | 0 | 4 |
| CSP-877                     | PHP Lab                                            | 0 | 0 | 4 | 2      | CSL-545  | Enterprise Resource Planning          | 3 | 1 | 0 | 4 |
| CSL-620                     | Unix and Shell Programming                         | 3 | 1 | 2 | 5      | CSL-607  | Information Storage System            | 3 | 1 | 0 | 4 |
| CSL-775                     | Web Technologies with PHP                          | 3 | 1 | 2 | 4      | CSL-819  | R Programming for Data Analysis       | 3 | 0 | 2 | 4 |
| CSD-675                     | Major Project work                                 | 0 | 0 | 8 | 4      | CSL876   | Big Data Analytics                    | 3 | 1 | 0 | 4 |
| CSD-897                     | Project(Industrial) & Viva- Voce Examination       | 0 | 0 | 0 | 20     | CSL-606  | Soft Computing                        | 3 | 1 | 0 | 4 |
| Departmental Electives (DE) |                                                    |   |   |   |        | CSL 241  | Management Information System         | 3 | 1 | 0 | 4 |
| Code                        | Subject                                            | L | T | P | Credit | CSL437   | Client Server Technology              | 3 | 0 | 0 | 3 |
| CSL 716                     | Discrete Mathematics                               | 3 | 1 | 0 | 4      | CSL 652  | Ethical Hacking with C                | 3 | 0 | 2 | 4 |
| CSL-836                     | Mobile Communicaion                                | 3 | 1 | 0 | 4      | CSL 242  | Information Security                  | 3 | 1 | 0 | 4 |
| CSL-870                     | Distributed Computing                              | 3 | 1 | 0 | 4      | CSL-549  | Cyber Law and Cyber Forensic          | 3 | 1 | 0 | 4 |
| CSL-889                     | Application Development with Android               | 3 | 0 | 2 | 4      | CSL-608  | Data Ware Hose and Data Mining        | 3 | 1 | 0 | 4 |
| CSL-783                     | Digital Image Analysis                             | 3 | 1 | 0 | 4      |          |                                       |   |   |   |   |
| CSL-842                     | Cluster and Grid Computing                         | 3 | 1 | 0 | 4      |          |                                       |   |   |   |   |
| CSL-894                     | Advanced .NET with AJAX and MVC                    | 3 | 0 | 2 | 4      |          |                                       |   |   |   |   |
| CSL-561                     | Big Data Technique with HADOOP                     | 3 | 1 | 0 | 4      |          |                                       |   |   |   |   |
| CSL-562                     | Data Analytics                                     | 3 | 1 | 0 | 4      |          |                                       |   |   |   |   |
| CSL-661                     | Machine Learning With R                            | 3 | 1 | 4 | 6      |          |                                       |   |   |   |   |
| CSL-551                     | Internet Markiting                                 | 3 | 1 | 4 | 6      |          |                                       |   |   |   |   |
| CSL-552                     | Search Engine Optimization & SMO                   | 3 | 1 | 4 | 6      |          |                                       |   |   |   |   |

## Semester Wise Subjects

| Semester-1            |                                     |
|-----------------------|-------------------------------------|
| HUL 219               | English Communication               |
| CSL-782               | Graphics and Multimedia             |
| CSL-740               | Software Engineering                |
| CSL-753               | Advanced Database management system |
| CSL712                | Internet and Java Programming       |
| CSP 781               | Java Lab                            |
| CSL-775               | Web Technologies with PHP           |
| CSP-741               | Graphics & Multimedia Lab           |
| CSL772                | Distributed Operating System        |
| Departmental Elective |                                     |

| Semester-2            |                                        |
|-----------------------|----------------------------------------|
| HUL220                | Technical Communication Practices      |
| CSL 813               | Programming with Python                |
| CSL814                | Data Communication & Computer Networks |
| CSL 815               | Ethical Hacking                        |
| CSL 817               | ASP .Net with C#                       |
| CSL-818               | Unix and Shell Programming             |
| CSD 850               | Minor project in java/.Net             |
| Departmental Elective |                                        |
| Departmental Elective |                                        |
| Departmental Elective |                                        |

| Semester -3           |                                      |
|-----------------------|--------------------------------------|
| CSL-874               | Advanced Java programming            |
| CSL-759               | Cryptography and Computer Security   |
| CSL-889               | Application Development with Android |
| SML886                | Professional Ethics                  |
| CSD-740               | Seminar - Research Paper             |
| CSP-876               | Advanced Java Lab                    |
| Departmental Elective |                                      |
| Departmental Elective |                                      |
| Departmental Elective |                                      |

| Semester-4 |                             |
|------------|-----------------------------|
| CSD895     | Internship and Project Work |
| CSD-897    | Dissertation                |