

**Master of Science ( Computer Applications & Information Technology)**  
**( Five Years Full Time Integrated Master Degree )**  
**Computer Department , Hem. North Gujarat University,**  
**Patan-384265, Gujarat State**

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**F.Y.M.SC. (CA & IT)**

**Semester-I**

- 101 Communication Skills
- 102 Mathematics - I
- 103 Introduction to Programming Language
- 104 Introduction to PC Packages & Operating System
- 105 Internet & Web - I

**Semester-II**

- 201 Mathematics - II
- 202 Financial Accounting & Management
- 203 Object Oriented Programming
- 204 Hardware Configuration & Solutions
- 205 Introduction to Web Designing

**S.Y.M.SC. (CA & IT)**

**Semester - III**

- 301 Numerical Methods
- 302 System Analysis and Design
- 303 Introduction To Algorithms
- 304 Client Server Architecture & Interface
- 305 Database Management System

**Semester - IV**

- 401 Statistical Methods
- 402 Digital Electronics
- 403 Object Oriented Programming with JAVA
- 404 Operating System & UNIX
- 405 Advance Database Architecture

**T.Y.M.SC. (CA & IT)**

- 301 Data Communication & Networking
- 302 Computer Graphics
- 303 Web Designing & E-Commerce
- 304 Visual Application Development (VC++)
- 305 Advance Programming With Java
- 306 Advance Database Architecture
- 307 Computer Based Optimization Models
- 308 System Development Project (Mini project)

## **Forth M.SC. (CA & IT)**

### **Semester-VII**

- 701 Software Engineering
- 702 Management Information System
- 703 Advanced Operating System
- 704 Advanced Web Technology - I
- 705 Advanced Java Technology

### **Semester-VIII**

- 801 Advanced Networking
- 802 Personality Development & Aptitude test
- 803 Pervasive Computing
- 804 Computer Security
- 805 Health & Yoga

## **Fifth M.SC. (CA & IT)**

### **Semester - IX**

- 901 Object Oriented analysis & Design With UML
- 902 Artificial Intelligence
- 903 Advanced Web Technology - II
- 904 Elective - I
- 905 Elective - II

### **Elective Subject**

- EL-1 Geographic Information System
- EL-2 Digital Image Processing
- EL-3 Bio-Informatics
- EL-4 Enterprise Resource Planning
- EL-5 Project Management Practices and Evaluation
- EL-6 Web Development using PHP
- EL-7 Embedded Systems
- EL-8 Data warehousing & Data Mining