Government College

Jatauli, Haily Mandi, Gurugram, Haryana
Email Id: gcjatauli1980@gmail.com

Ref No………………   Date……………………

B.Sc(NM with Computer Science)-Course Outcome

- To provide technology-oriented knowledge and ability to develop creative solutions.

- To develop skills to learn new technology.

- To apply computer science theory and software development concepts to construct computing based solutions.

- To design and develop computer programs/computer-based systems in the areas related to algorithms, networking, and web-design.

Subject: Computer Fundamentals and MS-Office (CS-101)
Learning Outcome
On completion of the course, students will be able to-
- Understand the concept of input and output devices of Computers and how it works and recognize the basic terminology used in computer programming.
- Aware about working and terminology related to Memory Devices.
- Understand different types of software-system, application and utilities.
- Understand the User Interfaces- CLI and GUI.
- Understand the booting process, BIOS and OS.
- Use MS Office Tools (Word, Excel and PowerPoint).

Subject: Computer Architecture (CS-102)
Learning Outcomes
After completion of the course, students will be able to
- Describe basic organization of computer.
- Understand different types of Logical Gates.
- Simplify the Boolean expression using Boolean algebra and K-Map.
- Demonstrate and perform computer arithmetic operations on integer and real numbers.
- Understand different types of combinational and sequential circuits and their implementation using logic gates.
- Identify and compare different methods for computer I/O mechanisms.
- Understand the lifecycle of an Instruction.

Subject: Programming in C (CS-201)
Learning Outcomes
After completing this course the student will be able to demonstrate the knowledge and ability to
- Understand the basic concept of C programming.
- Develop an algorithm and flowchart for any problem.
- Write a C Programming code for any given problem using conditional statements and Loops.
- Write a C Programming code for manipulation of Files.

Subject: Structured system analysis and design (CS-202)
Learning Outcomes
After completing this course the student will be able to
- Understand the System.
- Understand System process, system characteristics.
- Understand life cycle of software.
- Different phases of software development life cycle.
- Analysis and designing of system in details.

Subject: Data communication and Networking (CS-301)
Learning Outcomes
After completing this course the student will be able to
- Understand network communication using the layered concept, Open System Interconnect (OSI) and the Internet Model.
- Understand the analog and digital communication.
- Understand various transmission media
- Define different layers of network model.
- Answer the Protocols used on different layers.
- Understand the working of Internet.

Subject: Objected Oriented Programming Using C++ (CS-302)
Learning Outcomes
On successful completion of this module, students would be able to have
- Familiarization with a widely used programming concept – Object Oriented Programming.
- Develop logical thinking.
- Skill to write codes in C++ by applying concept of OOP, such as Objects, Classes, Constructors,
- Inheritance etc. to solve mathematical or real world problems.
- Ability to isolate and fix common errors in C++ programs.
- Skill to write code of abstracting mechanism.
- Skill to write programming code of inheritance and polymorphism.
- Ability to write code of exception handling.

Subject: Data Structures using C/C++ (CS-401)
Learning Outcomes
After completing the course, the students will demonstrate the knowledge and ability to
- Ability to analyze algorithms and algorithm correctness.
- Ability to summarize searching and sorting techniques.
- Ability to describe stack, queue and linked list operation.
- Ability to have knowledge of tree and graphs concepts.

Subject: Operating System (CS-402)
Learning Outcomes

After completing this course, the students will be able to
- Describe the important computer system resources and the role of operating system in their management policies and algorithms.
- Understand the process management policies and scheduling of processes by CPU.
- Evaluate the requirement for process synchronization and coordination handled by operating system.
- Describe and analyze the memory management and its allocation policies.
- Identify use and evaluate the storage management policies with respect to different storage management technologies.
- Identify the need to create the special purpose operating system.
- Identify the basic Unix and Windows System Calls.

Subject: Database Management System (CS-501)
Learning Outcomes
After completing this course the student will be able to demonstrate the knowledge and ability to
- The main objective of this course is to enable students to the fundamental concepts of database analysis and design.
- To recognize the importance of database analysis and design in the implementation of any Database application and to understand the process of drawing the ER-Diagrams.
- It also gives the knowledge of the roles of transaction processing and concurrency control.
- Understand the basic principles of database management systems.
- Write SQL queries for a given context in relational database.
- Discuss normalization techniques with simple examples.

Subject: Introduction to Internet and Web Technologies (CS-502)
Learning Outcomes
This course is intended to teach the basics involved in publishing content on the World Wide Web. This includes the 'language of the Web' – HTML, the fundamentals of how the Internet and the Web function, a basic understanding of graphic production with a specific stress on creating graphics for the Web, and a general grounding introduction to more advanced topics such as programming and scripting. This will also expose students to the basic tools and applications used in Web publishing.
- Analyze a web page and identify its elements and attributes. ·
- Create web pages using XHTML and Cascading Style Sheets.
- Build dynamic web pages using JavaScript (Client side programming).
- Create XML documents and Schemas.

Subject: Visual Basic Programming (CS-601)
Course Outcomes
After completing this course the student will be able to demonstrate the knowledge and ability to
- List the visual programming concepts.
- Explain basic concepts and definitions.
- Express constants and arithmetic operations.
- Distinguish variable and data types.
- Code visual programs by using Visual Basic work environment.
- Distinguish and compose events and methods.
- Recognize and arrange control structures.
- Design a complete program using visual programming concepts.

- Prepare various projects by helping visual programming.
- Prepare project in visual programming.
- Manage and analyze prepared project with programs.
- Interpret and report obtaining results.

Subject: Software Engineering (CS-602)
Learning Outcomes
After completing this course the student will be able to demonstrate the knowledge and ability to
- An ability to identify, formulates, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation analyzes and interprets data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies