

PROGRAM OUTCOMES

At PIMG, B.Sc. (Hons.) CS program seeks to obtain the following outcomes for its enrolled students:

No.	Program Outcome
PO1	An ability to apply knowledge of computing and mathematics appropriate to the discipline.
PO2	An ability to identify, formulate, and develop solutions to computational challenges.
PO3	An ability to use appropriate techniques, skills, and tools necessary for computing practice.
PO4	An understanding of professional, ethical, legal, security, and social issues and responsibilities for the computing profession.
PO5	An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computational systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
PO6	An ability to apply design and development principles in the construction of software systems of varying complexity.
PO7	Recognition of the need for and ability to engage in continuing professional development.

Course Outcomes

Course Code	Course Name	Course Outcome
First Year (July to June 2020)		
BSCHNC S110	ENGLISH PAPER I	Students will be able to read a variety of texts critically and proficiently to demonstrate in writing or speech the comprehension, analysis, and interpretation of those texts. Students will interpret texts with attention to ambiguity, complexity, and aesthetic value.
BSCHNC S101	HINDI PAPER I (HINDI LANGUAGE & MORAL VALUES)	The student is able to develop the scientific approach and business skills
BSCHNC S102	ENTERPRENEURSHIP DEVELOPMENT	Student understands the concept, meaning and importance of entrepreneurship development, types and functions performed by entrepreneurs, importance of goal determination.
BSCHNC S103	MATHEMATICS PAPER I (ALGEBRA AND TRIGONOMETRY)	student learns how to - Work with matrices and determine if a given square matrix is invertible, learn to solve systems of linear equations and application problems requiring them, learn to compute determinants and know their properties, learn to find and use eigenvalues and eigenvectors of a matrix.

BSCHNC S104	MATHEMATICS PAPER II (CALCULUS AND DIFFERENTIAL EQUATIONS)	The students learn integrals that may involve logarithms, exponentials, polynomials, and powers by using the Fundamental Theorem of Calculus.
BSCHNC S105	MATHEMATICS PAPER III (VECTOR ANALYSIS AND GEOMETRY)	The student learns the fundamental concepts of multivariable calculus and to develop understanding and skills in the topic necessary for its applications to science and engineering.
BSCHNC S106	COMPUTER PAPER I (FUNDAMENTALS OF COMPUTERS)	The student is able to get the knowledge of computer organization, memory structure and computer architecture.
BSCHNC S107	COMPUTER PAPER II (PROGRAMMING IN C)	The students learn the complete knowledge of C language. And learn to develop logics which will help them to create programs and applications in C.
BSCHNC S108	PHYSICS PAPER I (MECHANICS AND PROPERTIES OF MATTERS)	The students learn about the concepts of forces, angular momentum and knowledge about the Constraint. The course will also give knowledge about the general parameter like velocity, acceleration and knowledge of M.I.
BSCHNC S109	PHYSICS PAPER II (THERMODYNAMICS AND STATISTICAL PHYSICS)	Students learn about the concepts of heat, work, and energy and different laws of thermodynamics.
Second Year (July to June 2021)		
BSCHNC S201	FOUNDATION COURSE PAPER I – (ENGLISH LANGUAGE)	The students learn to communicate effectively and appropriately in real life situation.
BSCHNC S202	HINDI PAPER II (HINDI LANGUAGE & MORAL VALUES)	The student is able to develop the scientific approach and business skills
BSCHNC S203	PAPER III ENVIRONMENTAL STUDIES	The students develop the understanding of environmental issues and its development.
BSCHNC S204	MATHEMATICS PAPER I	The student will study certain structures called groups, rings, fields and some related structures. Students give to student a

	(ABSTRACT ALGEBRA)	good mathematical maturity and enables to build mathematical thinking and skill.
BSCHNC S205	MATHEMATICS PAPER II (ADVANCED CALCULAS)	The student familiarizes with advanced Calculus concepts.
BSCHNC S206	MATHEMATICS PAPER III (DIFFERENTIAL EQUATION)	The student is able to strengthen the concepts of Differential Equations.
BSCHNC S207	COMPUTER PAPER I (OBJECT ORIENTED PROGRAMMING CONCEPT USING C++)	The student learns the basic principles of object-oriented in terms of software reuse and managing complexity. Also get the skill of problem solving and programming skills in C++ with extensive programming projects.
BSCHNC S208	PAPER II (DATA STRUCTURE)	The students learn the theory and develop the algorithm of different types of data structure. Also, understand the ADT and different operation of different data structure and learn its application in real life for different data structure.
BSCHNC S209	PAPER III (DATA COMMUNICATIONS AND COMPUTER NETWORKS)	The students develop to build an understanding of the fundamental concepts of computer networking and Familiarize with the basic taxonomy and terminology of the computer networking area.
BSCHNC S210	PAPER IV (COMPUTER GRAPHICS AND MULTIMEDIA)	Students will learn the main components of Computer Graphics and become familiar with building approach of graphics system components and algorithms related with them.
Third Year (July to June 2022)		
BSCHNC S 301	FOUNDATION COURSE PAPER I – ENGLISH	The student learns linguistic competence and make them enable to write reports, emails and CVs.
BSCHNC S 302	HINDI PAPER II (HINDI LANGUAGE & MORAL VALUES)	The student is able to develop the scientific approach and business skills
BSCHNC	PAPER III	The student understands the basics of computer science, to

S 303	BASICS OF COMPUTER AND INFORMATION AND TECHNOLOGY	develop proficiency in the practice of computing, and to prepare them for continued professional development.
BSCHNC S 304	MATHEMATICS PAPER I : LINEAR ALGEBRA AND NUMERICAL ANALYSIS	The student is able to understand the suitable and effective methods called Numerical Methods, for obtaining approximate representative numerical results of the problems.
BSCHNC S 305	MATHEMATICS PAPER II : REAL AND COMPLEX ANALYSIS	The student learns the fundamental ideas of the functions of complex and real variables and developing a clear understanding of the fundamental.
BSCHNC S 306	MATHEMATICS PAPER III : *OPTIONAL PAPER Optional I (Statistical Methods)	The student learns the statistical concepts to include measurements of location and dispersion, probability, probability distributions, sampling, estimation, hypothesis testing, regression, and correlation analysis, multiple regression and business/economic forecasting.
BSCHNC S 306	MATHEMATICS PAPER III : *OPTIONAL PAPER Optional II (Discrete Mathematics)	The student understands the notion of mathematical thinking, mathematical proofs, and algorithmic thinking, and be able to apply them in problem solving. Understand the basics of discrete probability and number theory, and be able to apply the methods from these subjects in problem solving.
BSCHNC S 306	MATHEMATICS PAPER III : *OPTIONAL PAPER Optional III (Mechanics)	The student learns the aspects of Mechanics in daily life.
BSCHNC S 306	MATHEMATICS PAPER III : *OPTIONAL PAPER Optional IV (Mathematical Modelling)	The student learns the basic mathematics in conjunction with practical methods of Applied Mathematics
BSCHNC S 306	MATHEMATICS PAPER III :	The student learns the mathematical modelling of financial and insurance markets with particular emphasis on the time-value

	*OPTIONAL PAPER Optional V (Financial Mathematics)	of money and interest rates.
BSCHNC S 307	COMPUTER PAPER I : DATABASE MANAGEMENT SYSTEM Relations – I	The student is able to get the sound introduction to the discipline of database management systems and to give a good formal foundation on the relational model of data and usage of Relational Algebra.
BSCHNC S 308	PAPER II OPERATING SYSTEM CONCEPTS	The student learns the working of an OS as a resource manager, file system manager, process manager, memory manager and I/O manager and methods used to implement the different parts of OS.
BSCHNC S 309	PAPER III ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEM	The student learns concepts of AI, expert system and the different types of systems that can be designed to solve problems
BSCHNC S 310	PAPER IV ANALYSIS AND DESIGN OF ALGORITHMS	The student learns the techniques for effective problem solving in computing.