



DPG DEGREE COLLEGE
(Affiliated to MDU Rohtak)
Sector-34, Near Marble Market, Gurugram 122001

BCA –

Program outcomes listed as follows:

BCA programme has been designed to prepare graduates for attaining the following specific outcomes:

An ability to apply knowledge of mathematics, computer science and management in practice.

An ability to enhance not only comprehensive understanding of the theory but its application too in diverse field.

The program prepares the young professional for a range of computer applications, computer organization, techniques of Computer Networking, Software Engineering, Web development, Database management and Advance Java .

An ability to design a computing system to meet desired needs within realistic constraints such as safety, security and applicability in multidisciplinary teams with positive attitude. An ability to communicate effectively.

In order to enhance programming skills of the young IT professionals, the program has introduced the concept of project development in each language/technology learnt during semester.

PROGRAM COURSE OUTCOMES:

PSO1: An ability to enhance the application of knowledge of theory subjects in diverse fields. PSO2: Develop language proficiency to handle corporate communication demands.

PSO3: Preparing students in various disciplines of technologies such as computer applications, computer networking, software engineering, JAVA, database concepts and programming.

PSO4: In order to enhance programming skills of the young IT professionals, the concept of project development in using the technologies learnt during the semester has been introduced.

PSO5: To enhance knowledge in robotics, provide experimental hardware equipment for teaching the basics of robotics, robot dynamics and control, and robot system design and application.

COURSE OBJECTIVES & COURSE OUTCOMES

S.N	COURSE OBJECTIVES	COURSE OUTCOMES
1.	BCA (Computer & Programming Fundamentals)- Ist SEMESTER	
	Paper: Computer & Programming Fundamentals	

<p>1 To Understand Basic of Computer and Working with OS</p> <p>2 To Develop Working Skills with Productivity tools, Graphics Designing and Internet.</p> <p>3 To Acquire Basic Programming Skills.</p> <p>4 To apply Computing in Problem Solving.</p>	<p>After the completion of the course, students will be able to</p> <p>1- Converse in Basic Computer Terminology.</p> <p>2- Formulate Opinions About the impact about of Computers on Society.</p> <p>3-Possess the knowledge of Basic Hardware Peripherals.</p> <p>4-Know and use different number systems and Basic of Programming.</p> <p>5-Solve Basic Computation Problems with C language.</p>
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Paper: PC Software	
<ol style="list-style-type: none"> 1. The basic features of Microsoft Office, Windows basics, and file management. 2. Develops familiarity with Word, Excel, PowerPoint, email, and Internet basics. 	<p>After the completion of the course, students will be able to</p> <ol style="list-style-type: none"> 1-Recognize when to use each of the Microsoft Office programs to create professional business documents. 2-Use Microsoft Office programs to create personal and/or business documents following current professional and/or industry standards. 3-Students have better understanding on MS office tools like Power point, excel, word. 4-Students get familiar with basics of windows.

Paper: Mathematics	
<ol style="list-style-type: none"> 1.To get basic knowledge about Sets,Matrices and Determinants, Relations and Function and Limits and Continuity etc. 2. To Study about the applications of Sets theory. 3. To Study about the applications of Matrices. 4.To Get basic knowledge about Differentiation, Indefinite Integral, Definite Integral etc. 5. To Study about the application of Definite integral. 6. To Study about the meaning of Differentiation. 	<p>After the completion of the course, students will be able to</p> <ol style="list-style-type: none"> 1.Solve the system of linear equations. Understand that Matrices are used in cryptography. 2.Explain a new class of function namely exponential and logarithmic. 3.Know Relationship between Indefinite Integral and Definite Integral. 4.Find the area of a function under the given curve.

Paper: Logical Organization of Computer-I	
<p>Comprehend how various computer-</p> <ol style="list-style-type: none"> 1-Functional units and components are built. 2-Determine the components of contemporary instruction sets and how they affect processor architecture. 3.To describe how each component of a memory hierarchy works, 4. To list and evaluate various computer I/O techniques. 	<p>After the completion of the course, students will be able to-</p> <ol style="list-style-type: none"> 1. To comprehend computer architecture topics connected to the design of contemporary processors, and to demonstrate their application, 2. To study I/Os and memories. 3. Analyze the performance of commercially available computers. 4. To develop reasoning for programming in assembly language

	Paper: ENVIRONMENTAL SCIENCE	
	<ol style="list-style-type: none"> 1. Explain disaster management basics and theory (cycle, phases, risk, crisis, emergency, disasters, resilience) 2. Compare hazards, disasters and associated natural phenomena and their interrelationships, causes and their effects - developing humanitarian Assistance before and after disaster 3. Compare anthropogenic hazards, disasters and associated activities and their interrelationships of the subsystems - Green House Effect, Global warming, Causes and their effects and development of humanitarian assistance before and after disaster 	<p>After the completion of the course, students will be able to</p> <ol style="list-style-type: none"> 1. Explain the effects of habitat degradation, exotic species, overexploitation, pollution and climate change on biodiversity in general. 2. Student will be able to understand disaster management basics and theory (cycle, phases, risk, crisis, emergency, disasters, resilience) 3. Student will be able to compare hazards, disasters and associated natural phenomena and their interrelationships, causes and their effects - developing humanitarian Assistance before and after disaster. 4. Student will be able to compare anthropogenic hazards, disasters and associated activities and their interrelationships of the subsystems - Green House Effect, Global warming, Causes and their effects and development of humanitarian assistance before and after disaster
2.	BCA IIND SEMESTER	
	Paper: C Programming	

1 The course is designed to provide complete knowledge of C language.
2 Students will be able to develop logics which will help them to create programs, applications in C.
3 Also by learning the basic programming constructs they can easily switch over to any other language in future.
4 It aims to train the student to the basic concepts of the C-programming language.
5 This course involves a lab component which is designed to give the student hands-on experience with the concepts.

After the completion of the course, students will be able to

- 1 Understanding a functional hierarchical code organization.
- 2 Ability to define and manage data structures based on problem subject domain.
- 3 Ability to work with textual information, characters and strings.
- 4 Ability to work with arrays of complex objects.
- 5 Understanding a concept of object thinking within the framework of functional model.
- 6 Understanding a concept of functional hierarchical code organization.
- 7 Understanding a defensive programming concept. Ability to handle possible errors during program execution.

Paper: Logical Organization Of Computer-II



	<ol style="list-style-type: none"> 1. To comprehend how various computer Functional units and components are built. 2. To determine the components of contemporary instruction sets and how they affect processor architecture. 3. To describe how each component of a memory hierarchy works, To list and evaluate various computer I/O techniques. 	<p>After the completion of the course, students will be able to</p> <ol style="list-style-type: none"> 1. In order to comprehend computer architecture topics connected to the design of contemporary processors, and to demonstrate their application, 2. To study I/Os and memories. 3. Analyze the performance of commercially available computers. 4. To develop reasoning for programming in assembly language
Paper: Mathematical Foundations Of Computer Science		
	<ol style="list-style-type: none"> 1 To Get basic knowledge about Frequency Distribution, Measure of central tendency and Correlation and Regression etc. 2. To Study the applications of Basic Statistics. 3. To Study the applications of Algorithm. 4. To Get basic knowledge about Graph theory, Trees and Number theory etc. 5. To Study the application of Graph theory and Trees. 6. To Study about cryptography. 	<p>After the completion of the course, students will be able to</p> <ol style="list-style-type: none"> 1. Understand the meaning of Data, Understand Mean Median and Mode. 2. Understand that Matrices are used in Cryptography. 3. Understand that Graphs are used to solve the problem of finding the shortest path between Two cities in a transportation network. 4. Know about sorting the data. 5. Know how number theory is used In cryptography. 6. Understand the importance of 7. Mathematics in Computer Science.
Paper: Structured System Analysis & Design		
	<p>Course Objectives</p> <ol style="list-style-type: none"> 1 A sound background in the analysis, design, testing and construction of civil structures; 2 Are proficient in applying their knowledge (in mathematics, science and engineering) and standard tools, specially computer hardware and software to solve technical problems; 3 Are all around individuals with strong social skill, able to work in team environments, competent in communication and information presentation, and possess a strong sense of professionalism and ethics; 4 Are productive from the first day in the work place and are committed to continuous improvement and lifelong learning. 	<p>After the completion of the course, students will be able to</p> <ol style="list-style-type: none"> 1 Perform standard analysis and design of structural systems following codes and modern practices. 2 Apply basic technical concepts to identify, analyze and solve technical problems involving structural, geotechnical, and material behavior under forces and fire. 3 Utilize modern surveying methods for land measurement and/or construction layout. 4 Utilize graphic techniques to produce engineering documents.. 5 Plan and prepare design and construction documents, such as specifications, contracts, change orders, engineering drawings, and construction schedules.

