



तेजस्वि नावधीतमस्तु  
ISO 9001:2008 & 14001:2004

## BCA Course

### Semester I

S.No.	Course code	Title of the Course
<b>Compulsory</b>		
1	BCA-101	Mathematics-I
2	BCA-103	Technical Communication
3	BCA-105	Introduction to Programming Language using C
4	BCA-107	Introduction to Computers & IT
5	BCA-109	Physics

**Practical/ Semi**

6	BCA-151	C Programming Lab
7	BCA-153	IT Lab

**Skill Enhanc**

8	BCA-155	Communication Skills
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**Semester II**

<b>S.No.</b>	<b>Course code</b>	<b>Title of the Course</b>
<b>Compuls</b>		
1	BCA-102	Mathematics-II
2	BCA-104	Principles of Management
3	BCA-106	Digital Electronics
4	BCA-108	Data Structure using C

5	BCA-110	Database Management System
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**Practical/ Seminar**

6	BCA-152	DS Lab
7	BCA-154	DBMS

**Skill Enhancement**

8	BCA-156	Cyber Ethics
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**Semester III**

S.No.	Course code	Title of the Course
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**Compulsory**

1	BCA-201	Mathematics-III
2	BCA-203	Computer Architecture
3	BCA-205	Front End Design Tool VB.Net
4	BCA-207	Principles of Accounting
5	BCA-209	Object Oriented Programming using

5	BCA-207	C++
<b>Practical/ Seminar</b>		
6	BCA-251	.NET Lab
7	BCA-253	C++ Lab
<b>Ability Enhancement</b>		
8	BCA-255	Software Development Skills

#### Semester IV

S.No.	Course code	Title of the Course
<b>Compulsory</b>		
1	BCA-202	Mathematics-IV
2	BCA-204	Web Technologies
3	BCA-206	Java Programming

4	BCA-208	Software Engineering
5	BCA-210	Computer Networks

**Practical/ Seminar**

6	BCA-252	Java Lab
7	BCA-254	Web Tech. Lab

**Personality Enhancement**

8	BCA-256	Personality Development Skills
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**Semester V**

S.No.	Course code	Title of the Course
<b>Compulsory</b>		
1	BCA-301	Operating System
2	BCA-303	Computer Graphics

3	BCA-305	E-Commerce
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**Electives (Sel**

4	BCA-307	Software Testing
5	BCA-309	Microprocessor
6	BCA-311	Advance Computer Network
7	BCA-313	Web Based Programming
8	BCA-315	Business Economics

**Practical/ Semi**

8	BCA--351	CG Lab
9	BCA-355	Summer Project/Training
10	BCA-357	Minor Project

**Semester VI**

S.No.	Course code	Title of the Course
<b>Compuls</b>		
1	BCA-302	Data Ware Housing & Data Mining

2	BCA-304	Mobile Computing
3	BCA-306	Linux Environment

**Electives (Sel**

4	BCA-308	Multimedia & its Applications
5	BCA-310	Bio Informatics
6	BCA-312	Artificial Intelligence
7	BCA-314	Network Security
8	BCA-316	Network Programming

**Practical/ Semi**

9	BCA-352	Linux Lab
10	BCA-356	Major Project
11	BCA-358	Seminar

## se Outcome

Course Outcome
<b>ory course</b>
<ul style="list-style-type: none"> <li>• To get the knowledge about the matrices, determinants and limits.</li> <li>• To study the basics of differential and integral calculus.</li> </ul>
<ul style="list-style-type: none"> <li>• To Understand the correct use of English Language and improve the Communication Skills of the students.</li> <li>• To have basic understanding of the correct use of English Language.</li> <li>• To improve oral as well as written communication skills.</li> </ul>
<ul style="list-style-type: none"> <li>• To be able to build own logic for a given problem and finally develop one s own programs</li> <li>• To understand the syntax and the semantics of C programming language.</li> </ul>
<p>This is an elementary course in computers and information technology. Upon completion of this course the student should be able to:</p> <ul style="list-style-type: none"> <li>• Discuss the evolution of computers in different generations.</li> <li>• Classify computers in different categories based on their capabilities.</li> <li>• Describe the major components of computers and information technology applications: Hardware, software, data, processes, computer networks and people.</li> <li>• Demonstrate an understanding of the importance of algorithms in the development of IT applications.</li> </ul>
<ul style="list-style-type: none"> <li>• To get the knowledge about the basic laws of nature such as motion, work, power and energy</li> <li>• To study the electrostatics, semiconductors and devices.</li> </ul>



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Various programs lets student understand the concept of datatypes, arrays, pointers, etc.

Basics of Information Technology lets students understand the concept of MS Excel, MS Word, MS Powerpoint & their functionality.

## ement Course

- To Understand the correct use of English Language and improve the Communication Skills of the students.
- To improve oral as well as written communication skills.

## Course Outcome

### ory course

- To get the Knowledge about sets, relations and functions.
- To study the basics of lattices and graphs.
- To get familiar with propositional logic.

- To get the knowledge about the important management concepts & their application,
- To have an insight of various functional departments in an organization.

- To learn about the design principles of different digital electronic circuits
- To study the applications of above circuits

- Understand the use and working of the various data structures.
- Learn to be able to build own algorithms and pseudocodes for the various applications of the basic data structures.

- To understand difference between storing data in FMS and DBMS and

advantages of DBMS.

- To understand conceptual and physical design of a database.
- To understand RDBMS and queries to design database and manipulate data in it.
- To know basic database backup and recovery.

### **nars/ Viva Voice**

To understand various concepts of Data Structure in Lab.

To understand various concepts of Database Management System in Lab.

### **ement Course**

To understand the concepts of cyber/internet ethics.

### **Course Outcome**

#### **ory course**

• To get the knowledge about the important mathematical concepts & their application regarding Measures of Central Tendancy & Dispersion.

- To learn the design of Control Unit and ALU of a typical computer
- To learn about the memory, input –ouput organization of a typical computer

- To get the Knowledge about different Object Oriented Features.
- To understand different architectures of .Net.

- To get the Knowledge about the important concepts and characteristics of accounting.
- To study the application of accounting in the general business environment.

- To gain knowledge of objects, Class, Data Abstraction, Encapsulation, Inheritance, Polymorphism and Dynamic Binding

inheritance, Polymorphism and Dynamic Binding.

- To know about constructing programs using Bottom-up design approach.

### **nars/ Viva Voice**

To understand the concepts of .NET programming language practically in lab.

To know about constructing programs using Bottom-up design approach.

### **ement Course**

To understand the concepts of Software development skills.

### **Course Outcome**

#### **ory course**

- To get the Knowledge about mathematical probability.
- To get familiar with various numerical techniques.

- Students should be able to design and implement a basic website.
- Students should be able to implement different navigation strategies.
- Students should be able to use client-side technologies (XHTML, CSS, forms, JavaScript).
- Students should be able to develop simple back-end database to support a website.
- Students should be able to recognize and evaluate website organizational structure and design elements.

- To make students well versed with programming in java.

- To gain knowledge of various software models.

- To gain knowledge of various software design activities.
- To learn cost estimation, software testing, Maintenance and debugging.

- The students will be exposed different types of media, multiplexing, switched networks, the Internet, TCP/IP suite, fibre-optic communications and the state-of-art networking applications.
- Various transmission media, their comparative study, fibre optics and wirelessmedia
- Categories and topologies of networks (LAN and WAN) and TCP/IP) and protocol suites
- Channel error detection and correction, MAC protocols, Ethernet and WLAN
- Details of IP operations in the Internet and associated routing principles.

### **nars/ Viva Voice**

- To make students well versed with programming in java.
- Students should be able to design and implement a basic website.
- Students should be able to use client-side technologies (XHTML, CSS,

### **ancement Course**

Outcome of this course is to develop the personality of the students by sharpening their personal skills.

### **Course Outcome**

### **ory course**

- To Understand the services provided by an operating system.

To understand the graphics applications and its use.

To understand the process of Electronic commerce and Business strategy involved in it.

**lect Any One)**

- Students should be able to design and implement a basic website.
- Students should be able to implement different navigation strategies.

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To understand the graphics applications and its use.

To get the industry exposure.

To develop a systematic approach towards what is learnt during summer project/training on particular platform.

**Course Outcome**

**ory course**

This course is an attempt to provide you with the basic information about data ware house and their development. This course also provides the basic conceptual background necessary to design and develop data ware house applications.

- To learn the basics of Wireless voice and data communications technologies.

- To build working knowledge on various telephone and satellite networks.
- To build skills in working with Wireless application Protocols to develop mobile content applications
- To build practical knowledge on WML and WML Script.

To understand Linux Operating System and its security.

**lect Any One)**

To understand the concept of Artificial Intelligence, Knowledge Representation, Logic, NLP and Learning.

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To understand Linux Operating System and its security.

To develop a systematic approach towards what is learnt during summer project/training on particular platform in a broader way.

To understand the concept of what has been developed in major project.