



Programme Outcomes

Course Outcomes

Academic Session 2021-2022

Bachelor of Vocation

Bhiwapur Mahavidyalaya, Bhiwapur

Programme Outcomes and Course Outcomes Index

Session	Course	Semester	Sr. No.	Subject
2021-2022	<u>Building Technology</u>	First	1	English & Communication Skill –I
			2	Soft Skill Development-I
			3	Aptitude Development-I
			4	Bar, Bender & Fixer -I
			5	Bar, Bender & Fixer -II
		Second	6	English & Communication Skill –II
			7	Soft Skill Development-III
			8	Aptitude Development –II
			9	Shuttering Carpenter -I
			10	Shuttering Carpenter -II
		Third	11	English & Communication Skill –III
			12	Soft Skill Development-III
			13	Aptitude Development –III
			14	Mason -I
			15	Mason -II
		Fourth	16	English & Communication Skill –IV
			17	Soft Skill Development –IV
			18	Aptitude Development –IV
			19	Painter & Decorator –I
			20	Painter & Decorator –II
		Fifth	21	English & Communication Skill –V
			22	Soft Skill Development –V
			23	Aptitude Development –V
			24	Scaffolder -I
			25	Scaffolder -II
		Sixth	26	Applied Computer Skill -I
			27	Applied Computer Skill -II
			28	Applied Computer Skill -III
			29	Project -Industry Based Project
Session	Course	Semester	Sr. No.	Subject
2021-2022	<u>Food Processing & Engineering</u>	First	1	English & Communication Skill –I
			2	Soft Skill Development-I
			3	Aptitude Development-I
			4	Fundamentals of Food & Nutrition

			5	Introduction to Food Processing
		Second	6	English & Communication Skill –II
			7	Soft Skill Development-II
			8	Aptitude Development –II
			9	Food Microbiology
			10	Dairy Technology
		Third	11	English & Communication Skill –III
			12	Soft Skill Development-III
			13	Aptitude Development –III
			14	Bakery and Confectionery
			15	Emerging Technologies in Food Industry
		Fourth	16	English & Communication Skill –IV
			17	Soft Skill Development –IV
			18	Aptitude Development –IV
			19	Fruits, Vegetables and Post-Harvest Technology
			20	Beverages Processing
		Fifth	21	English & Communication Skill –V
			22	Soft Skill Development –V
			23	Aptitude Development –V
			24	Technology of Animal Foods
			25	Cereals, Pulses Technology and Food Business
		Sixth	26	Applied Computer Skill -I
			27	Applied Computer Skill -II
			28	Applied Computer Skill -III
			29	Project - Industry Based Project

Session	Course	Semester	Sr. No.	Subject
2021-2022	<u>Software Development</u>	First	1	English & Communication Skill –I
			2	Soft Skill Development-I
			3	Aptitude Development-I
			4	Computer Fundamentals & Networking
			5	C- Programming
		Second	6	English & Communication Skill –II
			7	Soft Skill Development-III

			8	Aptitude Development –II
			9	Operating System Concepts & LINUX
			10	Programming in ‘C++’
		Third	11	English & Communication Skill – III
			12	Soft Skill Development-III
			13	Aptitude Development –III
			14	Data Structures
			15	Web Designing
		Fourth	16	English & Communication Skill – IV
			17	Soft Skill Development –IV
			18	Aptitude Development –IV
			19	Database Management System
			20	Web Development in PHP
		Fifth	21	English & Communication Skill –V
			22	Soft Skill Development –V
			23	Aptitude Development –V
			24	System Analysis & Software Engineering
			25	JAVA Programming
		Sixth	26	Applied Computer Skill -I
			27	Applied Computer Skill -II
			28	Applied Computer Skill -III
			29	Project- Industry Based Project
Session	Course	Semester	Sr. No.	Subject
2021-2022	<u>Hardware Technology and Networking</u>	First	1	English & Communication Skill –I
			2	Soft Skill Development-I
			3	Aptitude Development-I
			4	Computer Fundamentals
			5	Computer & Network Organization -I
		Second	6	English & Communication Skill –II
			7	Soft Skill Development-II
			8	Aptitude Development –II
			9	Operating System
			10	Computer & Network Organization -II

		Third	11	English & Communication Skill – III
			12	Soft Skill Development-III
			13	Aptitude Development –III
			14	Computer Hardware & Networking Administration
			15	Network Programming
		Fourth	16	English & Communication Skill – IV
			17	Soft Skill Development –IV
			18	Aptitude Development –IV
			19	Mobile Computing
			20	Internet Routing Design
		Fifth	21	English & Communication Skill –V
			22	Soft Skill Development –V
			23	Aptitude Development –V
			24	- Information & Network Security
			25	Linux OS Server
		Sixth	26	Applied Computer Skill -I
			27	Applied Computer Skill -II
			28	Applied Computer Skill -III
			29	Project- Industry Based Project

**BACHELOR OF VOCATION
BUILDING TECHNOLOGY**

SEMESTER-I

Soft Skill Development-I

Course Objectives and Course Outcomes

Course Objectives

1. To know the process of business communication.
2. To understand the concept of marketing.
3. To know the concept of motivation.
4. To understand the team dynamics.

Course Outcomes

1. Students will be able to understand the fundamental principles of effective business communication.
2. Students will apply the creative marketing techniques.
3. Students will be self-motivated.
4. Students will be able to work as a team.

Aptitude Development-I Course Objectives and Course Outcomes

Course Objectives

- 1 To know the arithmetic ability.
- 2 To understand the concept of LCM and HCM.
- 3 To know the concept of ecosystem.
- 4 To understand the computer skill.

Course Outcomes

1. Students will be able to understand and solve the arithmetic problems.
2. Students will be able to solve the LC Mand HCM problems.
3. Students will take care of ecosystem.
4. Students will be able to handle the computer.

SEMESTER-II Soft Skill Development-II Course Objectives and Course Outcomes

Course Objectives

1. To study the nature and concept of stress.
2. To understand the different types of job stress.
3. To know how to overcome stress of employee.
4. To learn different relaxation techniques.

Course Outcomes

1. Students will be able to understand the nature and concept of stress.
2. Students will be able to understand job stress.
3. Students will be able to overcome stress.
4. Students will be able to understand the importance of relaxation techniques.

Aptitude Development- II Course Objectives and Course Outcome

Course Objectives

- 1 To study simple interest.
- 2 To understand the calendar.
- 3 To know the concept of area.
- 4 To learn the different economic issues.

Course Outcomes

- 1 Students will be able to solve simple interest problems.
- 2 Students will be able to understand the calendar.
- 3 Students will be able to solve the problems on area.
- 4 Students will be able to understand the economic issues.

SEMESTER-III

Soft Skill Development-III Course Objectives and Course Outcomes

Course Objectives

1. To understand the concept of stealers.
2. To study the importance of planning.
3. To study the concept of fatigue.
4. To learn the concept of scheduling and planning.

Course Outcomes

1. Students will be able to understand the importance of time stealers.
2. Students will be able to plan their academic work.
3. Students will be able to overcome fatigue.
4. Students will be able learn the concept of scheduling and planning.

Aptitude Development-III Course Objectives and Course Outcomes

Course Objectives

- 1 To understand the concept of charts.
- 2 To know the artificial language.
- 3 To study the concept of verbal reasoning.
- 4 To learn the computer skill.

Course Outcomes

- 1 Students will be able to identify different charts.
- 2 Students will be able to understand the coding language.
- 3 Students will be able to learn the verbal reasoning.
- 4 Students will be able to handle the computer.

SEMESTER-IV Aptitude Development-IV Course Objectives and Course Outcome

Course Objectives

- 1 To study the logical reasoning.
- 2 To analyze the different arguments.
- 3 To study the concept of nonverbal reasoning.

- 4 To understand the comprehension.

Course Outcomes

- 1 Students will be able to solve the logical reasoning problems.
- 2 Students will cope with the arguments.
- 3 Students will be able to solve the nonverbal problems.
- 4 Students will be able to understand comprehension.

SEMESTER-V

Soft Skill Development-IV

Course Objectives and Course Outcomes

Course Objectives

1. To study the corporate culture
2. To analyze the different characteristics of leader.
3. To study the concept of attitude.
4. To understand the new trends in CRM.

Course Outcomes

1. Students will be able to study the corporate culture.
2. Students will be able to cope with large group situation.
3. Students will be able to develop their own positive attitude.
4. Students will be able to understand CRM.

Aptitude Development-V

Course Objectives and Course Outcome

Course Objectives

- 1 To understand the data interpretation methods.
- 2 To study the number series.
- 3 To know the general awareness issues.

Course Outcomes

- 1 Students will be able to solve the data interpretation problems.
- 2 Students will be able to acquire knowledge of number series-solving skills.
- 3 Students will be able to understand general awareness issues.

SOFTWARE DEVELOPMENT

SEMESTER –I

Course Objectives and Course Outcomes

Paper -1-Computer Fundamentals & Networking

Course Objectives

1. To understand the fundamental concepts of computer networking.
2. To introduce the students advanced networking concepts, preparing the students for entry advanced course in computer networking.
3. To understand the basic computer network technology.
4. To identify the different types of network topologies and protocols.

Course Outcomes

After completion of this course, students will be able to;

1. Gain the knowledge of computer equipment including both hardware and software.
2. Identify, difference between number system and convert number from one system to another.
3. Understand the basics of computer networks, protocols used in communication and transmissions in computer networks.
4. Understand the knowledge of the services provided by operating systems.

Paper -2 -C Programming

Course Objectives and Course Outcomes

Course Objectives

1. To understand the Programming basics and the fundamentals of C.
2. To know the Data types of C.
3. To use if statement and loops.
4. To arrange data in arrays.

Course Outcomes

After completion of this course, students will be able to;

1. Develop the problem solving and programming skills.
2. Understand the various concepts of C language.
3. Implement strings in your C programme.
4. Understand the basics of file handling mechanisms.

SEMESTER –II

Course Objectives and Course Outcomes

Subject – Paper -1-Operating System Concepts & LINUX

Course Objectives

1. To learn the objectives & functions of operating systems.
- 2.To learn and understand the various memory and scheduling algorithms.
- 3.To learns the Linux operating system & basics syntax for a commands
- 4.To understand the processes & its life cycle.

Course Outcomes

After completion of this course, students will be able to;

- 1.Build the Linux operating system and configure it.
- 2.Discover Linux commands for working with linux environment.
- 3.Create processes and its life cycle.

Subject – Paper -2- Programming in C++

Course Objectives and Course Outcomes

Course Objectives

1. To understand the basic programming and OOPs concepts.
2. To understand C++ programs.
3. Arrange same data systematically with array.
4. To understand the Constructors and destructors in C++

Course Outcomes

After completion of this course, students will be able to;

1. Describe OOPs concepts and benefits of OOPs.
- 2.Use functions and pointers in your C++ program.
3. Explain array and strings and create programs using them.
4. Describe and use constructors and destructors.

SEMESTER –III

Course Objectives and Course Outcomes

Subject – Paper -1-Data Structures

Course Objectives

- 1.To learn the concept of various data structures, implementation and applications.

- 2.To demonstrate basic computer and internet including operating a computer.
- 3.Togain the knowledge of foundational mathematical concepts in computing.
4. To understand the aptitude for analyzing information and making logical conclusions.

Course Outcomes

After completion of this course, students will be able to;

- 1.Learnthe concept of various data structures, implementation and applications.
- 2.Demonstrate basic computer and internet including operating a computer.
3. Understand the knowledge of the foundational mathematical concepts in computing.
- 4.Demonstrate the aptitude for analyzing information and making logical conclusions.

Subject – Paper -2-Web Designing

Course Objectives and Course Outcomes

Course Objectives

- 1.To learn the concept of HTML, implementation, Command and applications.
- 2.To demonstrate the basic computer and internet including operating a computer.
3. Understand knowledge of the foundational mathematical concepts in computing.
- 4.To demonstrate aptitude for analyzing information and making logical conclusions.

Course Outcomes

After completion of this course, students will be able to;

- 1.Learn the concept of HTML, implementation, Command and applications.
- 2.Demonstrate the basic computer and internet including operating a computer.
3. Understand the knowledge of the foundational mathematical concepts in computing.
- 4.Demonstrate the aptitude for analyzing information and making logical conclusions.

SEMESTER –IV

Course Objectives and Course Outcomes

Subject – Paper -1-Database Management System

Course Objectives

1. To learn the basic principles of database management system.
2. To understand the concepts of database manipulation using SQL and PL/SQL.

3. To design a database to solve real life applications.
4. To demonstrate aptitude for analyzing information and making logical conclusions.

Course Outcomes

After completion of this course, students will be able to;

1. Learn the basic principles of database management system.
2. Understand the concepts of database manipulation using SQL and PL/SQL.
3. Design a database to solve real life applications.
4. Demonstrate aptitude for analyzing information and making logical conclusions.

Subject – Paper -2-Web Development in PHP

Course Objectives and Course Outcomes

Course Objectives

1. To learn the client-side and server-side scripting.
2. To learn PHP Programming.
3. To learn how to develop dynamic websites and interact with databases through Internet.
4. To demonstrate aptitude for analyzing information and making logical conclusions.

Course Outcomes

After completion of this course, students will be able to;

1. Learn the client-side and server-side scripting.
2. Learn PHP Programming.
3. Learn how to develop dynamic websites and interact with databases through Internet.
4. Demonstrate aptitude for analyzing information and making logical conclusions.

Semester –V

Course Objectives and Course Outcomes

Subject – Paper -1: System Analysis & Software Engineering

Course Objectives

1. To learn various software development, methodologies and practices.
2. To understand the software.
3. To understand the high level design.

4.To learn various evaluation methods in software development.

Course Outcomes

After completion of this course, students will be able to;

1. Learn various software development, methodologies and practices.
2. Understand the software.
3. Understand the high level design.
4. Learn various evaluation methods in software development.

Subject – Paper -2: JAVA Programming

Course Objectives and Course Outcomes

Course Objectives

- 1.To review the concept of OOP.
2. To learn JAVA programming environment.
- 3.To practice programming in JAVA.
4. To learn GUI application development in JAVA.

Course Outcomes

After completion of this course, students will be able to;

1. Review the concept of OOP.
2. Learn JAVA programming environment.
3. Practice programming in JAVA
4. Learn GUI application development in JAVA.

Hardware Technology and Networking

Course Objectives and Course Outcomes

Semester-I

Paper –I:- Computer Fundamentals

Course Objectives

1. To describes the computer and its general features.
2. To define input and output units of computer.

3. To know the terms of motherboard, CPU, RAM ,ROM, BIOS, CMOS etc.
4. To understand the operating system and its commands, Internal, External.

Course Outcomes

After completion of this course, students will be able to;

1. Describes the computer and its general features.
2. Define input and output units of computer.
3. Know the terms of motherboard, CPU, RAM ,ROM, BIOS, CMOS etc.
4. Understand the operating system and its commands, Internal, External.

Paper- II :- Computer & Network organization-I

Course Objectives and Course Outcomes

Course Objectives

1. To understand the Basic network and its types.
2. To understand the networking devices like repeaters, NIC, Hub, switches, Routers, Bridges.
3. To understand and use correctly communication network.
4. To explain internet, and how it works.

Course Outcomes

After completion of this course, students will be able to;

1. Understand the basic network and its types.
2. Understand the networking devices like repeaters, NIC, Hub, switches, Routers, Bridges.
3. Understand and use correctly communication network.
4. Explain internet, and how it works.

Semester-II

Course Objectives and Course Outcomes

Paper-I :-Operating System

Course Objectives

1. To understand the role of operating system as a system software.
2. To understand directory commands; DIR, MD, RD.
3. To define I/O system, Device, management policies and secondary storage structure.

4. To compare UNIX and windows based OS.

Course Outcomes

After completion of this course, students will be able to;

1. Understand the role of operating system as a system software.
2. Understand directory commands; DIR, MD, RD.
3. Define I/O system, Device, management policies and secondary storage structure.
4. Compare UNIX and windows based OS.

Paper -II :-Computer & Network Organization – II

Course Objectives and Course Outcomes

Course Objectives

1. To understand the use of LAN.
2. To study how to configure Pc's running Linux so that they receive Ip addresses.
3. To understand and build the skills of Sub netting and routing mechanisms.
4. To use Linux commands to understand how a pc is configure.

Course Outcomes

After completion of this course, students will be able to;

1. Understand the use of LAN.
2. Study how to configure Pc's running Linux so that they receive Ip addresses.
3. Understand and build the skills of Sub netting and routing mechanisms.
4. Use Linux commands to understand how a pc is configure.

Semester-III

Course Objectives and Course Outcomes

Paper –I:-Computer Hardware & Network Administration

Course Objectives

1. To understand system input and output and its features.
2. To understand parts of CPU.
3. To understand types of computer memory & its characteristics.
4. To explain secondary memory and its formatting.

Course Outcomes

After completion of this course, students will be able to;

1. Understand system input and output and its features.
2. Understand parts of CPU.
3. Understand types of computer memory & its characteristics.
4. Explain secondary memory and its formatting.

Paper- II :- Network Programming

Course Objectives and Course Outcomes

Course Objectives

- 1.To understand the detailed knowledge of the TCP/UDP sockets.
- 2.To apply knowledge of Unix/Linux operating system to build robust client & server software.
- 3.To describe major technologies and protocols used network communications.
- 4.To make use of different types I/O.

Course Outcomes

After completion of this course, students will be able to;

1. Understand the detailed knowledge of the TCP/UDP sockets.
2. Apply knowledge of Unix/Linux operating system to build robust client & server software.
3. Describe major technologies and protocols used network communications.
4. Make use of different types I/O.

Semester-IV

Paper -I :- Mobile Computing

Course Objectives and Course Outcomes

Course Objectives

1. To understand the mobile communication and its characteristics.
2. To define mobile technologies in terms of hardware ,software and communication.
3. To evaluate the effectiveness of different mobile computing framework.
4. To describe how mobile technology functions to enable other computing technologies.

Course Outcomes

After completion of this course, students will be able to;

1. Understand the mobile communication and its characteristics.
2. Define mobile technologies in terms of hardware , software and communication.
3. Evaluate the effectiveness of different mobile computing framework.
4. Describe how mobile technology functions to enable other computing technologies.

Paper-II :- Internet Routing Design

Course Objectives and Course Outcomes

Course Objectives

1. To understand network, network routing, and internet service.
2. To understand client server architecture.
3. To understand types & switch, modes of switches.
4. To understand the routing protocol.

Course Outcomes

After completion of this course, students will be able to;

1. Understand network, network routing, and internet service.
2. Understand client server architecture.
3. Understand types & switch, modes of switches.
4. Understand the routing protocol.

Semester-V

Paper -I :- Information and Network Security

Course Objectives and Course Outcomes

Course Objectives

1. To develop policies and procedures to manage enterprise security risk.
2. To analyze and resolve security issues in networks and computer system.
3. To understand wireless networks, methods and procedures.
4. To understand firewalls network.

Course Outcomes

After completion of this course, students will be able to;

1. Develop policies and procedures to manage enterprise security risk.
2. Analyze and resolve security issues in networks and computer system.
3. Understand wireless networks, methods and procedures.
4. Understand firewalls network.

Paper –II:- Linux of Server

Course Objectives and Course Outcomes

Course Objectives

1. To understand the basic information on Linux.
2. To implement and administer a Linux server.
3. To implement the file services.
4. To secure the Linux server.

Course Outcomes

After completion of this course, students will be able to;

1. Understand the basic information on Linux.
2. Implement and administer a Linux server.
3. Implement the file services.
4. Secure the Linux server.

Semester-I

Food Processing & Engineering

Course Objectives and Course Outcomes

Paper-I Fundamentals of Food & Nutrition

Course Objectives

1. To summarize and critically discuss/ understand both fundamental and applied aspects of food science.
2. To explain the functions of specific nutrients in maintaining health, identifying nutrient specific foods and applying the principles from the various facets of food science and related disciplines to solve practical as well as real-world problems.

3. To locate and apply evidence-based guidelines and protocols and get imparted with critical thinking to take leadership roles in the fields of health, dietetics, special nutritional needs and nutritional counseling.

Course Outcomes

After completion of this course, students will be able to;

1. Summarize and critically discuss/ understand both fundamental and applied aspects of food science.
2. To explain the functions of specific nutrients in maintaining health, identifying nutrient specific foods and applying the principles from the various facets of food science and related disciplines to solve practical as well as real-world problems.
3. To locate and apply evidence-based guidelines and protocols and get imparted with critical thinking to take leadership roles in the fields of health, dietetics, special nutritional needs and nutritional counseling.

Food Processing & Engineering

Course Objectives and Course Outcomes Paper-II Introduction to Food Processing

Course Objectives

1. To understand the basic concepts of food processing and engineering and will get knowledge of the different instruments used in food processing and engineering.
2. To understand the different units operations used in food processing.
3. To understand the basic of heat transfer and energy requirement in food industry, physical properties of water and water activity.

Course Outcomes

After completion of this course, students will be able to;

1. Understand the basic concepts of food processing and engineering and will get knowledge of the different instruments used in food processing and engineering.
2. Understand the different units operations used in food processing.
3. Understand the basic of heat transfer and energy requirement in food industry, physical properties of water and water activity.

Semester-II

Food Processing & Engineering Paper-I- Food Microbiology Course Objectives and Course Outcomes

Course Objectives

1. To understand the basic concepts in microbiology, principles and working of different instruments used in lab along with its application.
2. To get the knowledge about , how bacteria grows, different factors which affect their growth, different requirements for bacterial growth, different isolation and purification methods used for bacteria.
3. To understand the principles and importance of different staining methods used for bacteria.
- 4.To gain knowledge from different sources, types of bacteria that cause spoilage in food, various changes that occur during spoilage in food depending on their nutrient content.
5. To understand the different methods that can be used to prevent and detect bacterial spoilage of food.
6. To understand the importance of preservatives different methods and its importance.

Course Outcomes

After completion of this course, students will be able to;

1. Understand the basic concepts in microbiology, principles and working of different instruments used in lab along with its application.
2. Get the knowledge about , how bacteria grows, different factors which affect their growth, different requirements for bacterial growth, different isolation and purification methods used for bacteria.
3. Understand the principles and importance of different staining methods used for bacteria.
4. Gain the knowledge from different sources, types of bacteria that cause spoilage in food, various changes that occur during spoilage in food depending on their nutrient content.
5. Understand the different methods that can be used to prevent and detect bacterial spoilage of food.
6. Understand the importance of preservatives different methods and its importance.

Semester-III

Paper-I Bakery and Confectionery Course Objectives and Course Outcomes

Course Objectives

1. To understand the basic terms and concepts related to bakery and confectionary products.
2. To gain the knowledge related to various machineries used in bakery.
3. To learn the role of different ingredients in bakery products.
4. To know the manufacturing details of bakery and confectionary products.
5. To learn about the different parameters for setting up bakery unit.

6. To understand the cost components like fixed cost and learn how to do the costing of the product.

Course Outcomes

After completion of this course, students will be able to;

1. Understand the basic terms and concepts related to bakery and confectionary products.
2. Gain the knowledge related to various machineries used in bakery.
3. Learn the role of different ingredients in bakery products.
4. Know the manufacturing details of bakery and confectionary products.
5. Learn about the different parameters for setting up bakery unit.
6. Understand the cost components like fixed cost and learn how to do the costing of the product.

Semester-IV
Course Objectives and Course Outcomes
Paper-I- Fruits, Vegetables and Post-Harvest Technology

Course Objectives

1. To understand the importance, current status, nutritional composition and reasons of spoilage of fruits and vegetables.
2. To learn the different preservation methods such as pasteurization, sterilization, canning, freezing, refrigeration etc.

Course Outcomes

After completion of this course, students will be able to;

1. Understand the importance, current status, nutritional composition and reasons of spoilage of fruits and vegetables.
2. Learn the different preservation methods such as pasteurization, sterilization, canning, freezing, refrigeration etc.

Principal
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