

KONGUNADU ARTS AND SCIENCE COLLEGE

(AUTONOMOUS)

COIMBATORE – 641 029



DEPARTMENT OF COMPUTER TECHNOLOGY

COURSE OUTCOMES (CO)

(2023 – 2024 and Onwards)

Programme Code : 11	B. Sc Computer Technology		
Title of the Paper: Core Paper 1 – C Programming			
Batch 2023 - 2024	Hours / Week 5	Total Hours 75	Credits 4

Course Objectives

1. To impart adequate knowledge on the need of programming languages and problem solving techniques.
2. To develop an in-depth understanding of functional and logical concepts of C Programming.
3. To provide exposure to problem-solving through C programming.
4. To familiarize the basic syntax and semantics of C Language.

Course Outcomes (CO)

K1 to K5	CO1	Recollect various programming constructs and to develop C programs.
	CO2	Understand the fundamentals of C programming.
	CO3	Choose the right data representation formats based on the requirements of the problem.
	CO4	Analyze different Operations on arrays, functions, and pointers,
	CO5	Evaluate the usage of structures, unions and files.

MAPPING

PSO CO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	H
CO2	S	S	H	S	S
CO3	S	M	H	H	H
CO4	S	S	S	S	M
CO5	S	M	S	S	S

S – Strong

H – High

M – Medium

L – Low

UCT 3

Sub. Code: 23UCT1CL

Programme Code : 11	B. Sc Computer Technology		
Title of the Paper: Core Practical 1 – C Programming Lab			
Batch 2023 - 2024	Hours / Week 5	Total Hours 75	Credits 2

Course Objectives

1. To introduce the field of programming using C language.
2. To enhance the analyzing and problem solving skills and use the same for writing programs in C.

Course Outcomes (CO)

K3 to K5	CO1	Develop logical and programming skills using the fundamentals and basics of C Language.
	CO2	Apply effective usage of arrays and strings.
	CO3	Implement functions to arranging set of values using different sorting techniques.
	CO4	Apply pointers to perform memory management.
	CO5	Implement files and command line arguments.

MAPPING

CO \ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	H	H	H	H
CO4	S	S	M	H	H
CO5	S	H	S	H	H

S –Strong

H –High

M– Medium

L –Low

Programme Code : 11	B. Sc Computer Technology		
Title of the Paper : Part IV - Environmental Studies**			
Batch 2023 - 2024	Hours / Week 2	Total Hours 30	Credits 2

Course Objectives

1. The course will provide students with an understanding and appreciation of the complex interactions of man, health and the environment. It will expose students to the multi-disciplinary nature of environmental health sciences.
2. To inculcate knowledge and create awareness about ecological and environmental concepts, issues and solutions to environmental problems.
3. To shape students into good “Ecocitizens” thereby catering to global environmental needs.
4. This course is designed to study about the types of pollutants including gases, chemicals petroleum, noise, light, global warming and radiation as well as pollutant flow and recycling and principles of environmental pollution such as air, water and soil.
5. The course will address environmental stress and pollution, their sources in natural and workplace environments, their modes of transport and transformation, their ecological and public health effects, and existing methods for environmental disease prevention and remediation.

Course Outcomes (CO)

On successful completion of the course, the students will be able to

K1 to K5	CO 1	Understand how interactions between organisms and their environments drive the dynamics of individuals, populations, communities and ecosystems.
	CO2	Develop an in depth knowledge on the interdisciplinary relationship of cultural, ethical and social aspects of global environmental issues.
	CO3	Acquiring values and attitudes towards complex environmental socio-economic challenges and providing participatory role in solving current environmental problems and preventing the future ones.
	CO4	To gain inherent knowledge on basic concepts of biodiversity in an ecological context and about the current threats of biodiversity.
	CO5	To appraise the major concepts and terminology in the field of environmental pollutants, its interconnections and direct damage to the wildlife, in addition to human communities and ecosystems.

Programme Code : 11		B. Sc Computer Technology	
Title of the Paper : Core Paper 2 – Digital Logic and Circuit Designs			
Batch 2023 - 2024	Hours / Week 4	Total Hours 60	Credits 4

Course Objectives

1. The students should get the Knowledge about the Number System, Number representation and Number Conversion.
2. To learn the concept of Digital Circuits, Circuit Constructions and Simplifications of Boolean functions.
3. To know the concept of Arithmetic Circuits, Combination Circuits, Counters and Registers.

Course Outcomes (CO)

K1 to K5	CO1	Retain the information about the Computer Number systems and conversions in Digital Computer System.
	CO2	Understand the concepts of Boolean expressions, Logic Gates and to apply the methods to simplifying the Boolean expression.
	CO3	Apply the knowledge to perform arithmetical operations using various logical circuits and to design various Synchronous and Asynchronous.
	CO4	Analyse the function of Counters and Registers.
	CO5	Evaluate the working nature of various Flip-Flops and Circuits.

MAPPING

CO \ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	H	S	M	H
CO2	S	H	S	S	S
CO3	S	S	H	M	M
CO4	S	M	H	H	M
CO5	S	S	M	S	S

S – Strong

H – High

M – Medium

L – Low

Programme Code : 11		B. Sc Computer Technology	
Title of the Paper : Core Paper 3 – Object Oriented Programming with C++			
Batch 2023 - 2024	Hours / Week 3	Total Hours 45	Credits 4

Course Objectives

1. To develop a greater understanding of the issues involved in programming language design and object oriented paradigms and its implementation.
2. To impart adequate knowledge on the need of object oriented programming languages.
3. To enhance problem solving and programming skills in C++ by implementing the object oriented concepts.

Course Outcomes (CO)

K1 to K5	CO1	Remember the characteristics of Procedure and Object Oriented Programming Languages.
	CO2	Understand the fundamentals of C++ programming structure, function overloading and constructors.
	CO3	Examine different C++ features such as composition of objects, Operator overloading and inheritance.
	CO4	Analyse the performance of run-time polymorphism using pointers and virtual functions.
	CO5	Evaluate the usage of object oriented programming in terms of software reuse and managing complexity to solve real-world problems.

MAPPING

PSO					
CO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	H
CO2	S	S	H	S	S
CO3	S	H	H	S	H
CO4	S	S	S	S	M
CO5	S	S	H	S	S

S –Strong

H –High

M– Medium

L –Low

UCT 7

Sub. Code : 23UCT2CM

Programme Code : 11	B. Sc Computer Technology		
Title of the Paper : Core Practical 2 – Object Oriented Programming with C++ Lab			
Batch 2023 - 2024	Hours / Week 3	Total Hours 45	Credits 2

Course Objectives

1. To develop the programs for solving the problems using function overloading, constructors, classes and object.
2. To apply the object oriented programming concepts to solve the problems.

Course Outcomes (CO)

K3 to K5	CO1	Implement the concepts of object oriented programming.
	CO2	Apply string functions to perform operator overloading.
	CO3	Analyze virtual functions and inheritance.
	CO4	Apply sequential file I/O operations to manipulate a text file
	CO5	Evaluate the implementation of command line arguments.

MAPPING

PSO CO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	S	S
CO2	S	S	M	S	S
CO3	S	H	H	H	H
CO4	S	S	S	H	H
CO5	S	H	S	S	S

S –Strong

H –High

M– Medium

L –Low

Programme Code : 11	B. Sc Computer Technology		
Title of the Paper : Part IV - Value Education - Moral and Ethics**			
Batch 2023 - 2024	Hours / Week 2	Total Hours 30	Credits 2

Course Objectives

1. To impart Value Education in every walk of life.
2. To help the students to reach excellence and reap success.
3. To impart the right attitude by practicing self introspection.
4. To portray the life and messages of Great Leaders.
5. To insist the need for universal brotherhood, patience and tolerance.
6. To help the students to keep them fit.
7. To educate the importance of Yoga and Meditation.

Course Outcomes (CO)

K1 to K5	CO1	Will be able to recognize Moral values, Ethics, contribution of leaders, Yoga and its practice
	CO2	Will be able to differentiate and relate the day to day applications of Yoga and Ethics in real life situations
	CO3	Can emulate the principled life of great warriors and take it forward as a message to self and the society
	CO4	Will be able to Analyse the Practical outcome of practicing Moral values in real life situation
	CO5	Could Evaluate and Rank the outcome of the pragmatic approach to further develop the skills