DEPARTMENT OF CIVIL ENGINEERING

Ref No: GRIET/CE/1C/G/21-22

21 Feb 2022

From,
Dr C. Lavanya
Professor & HOD
Civil Engineering Dept

To
The Principal,
GRIET,
Hyderabad.
Subject: Value Added Course on C Coding SkillsReg.,

Sir,

With reference to above subject, we the Department of Civil Engineering introducing Value Added Course on "C Coding Skills"in associate with placement office, Resource person is Geetha Mahadeo Ambildhukefrom CSE Department for III-year B. Tech Civil Engineering.Certificate will be awarded to all students who clear the examination. The examination pattern is 30 marks for Internal Examination and 70 marks for External Examination. Kindly, permit us to conduct the proposed Value-Added Course. Timetable and syllabus are enclosed below.

Thanking you,

Yours faith fully,
HOD,CE

The Course is Provided with GR21V8002 as course code which is offered in 2021-22 A.Y

J. Praveen

Gokaraju Rangaraju Institute of Engineering and Technology

Department of Civil Engineering

Time-Table for Value Added Course AY: 2021-22 (II-Semester)

wef: 28th Feb 2022

Day	09:00 - 10:50	10:50 - 11:45	11:30 -12:30 (For Theory) 11:30 - 13:00*(For Lab)	03:00-04:00 PM
Monday		VAC(C Coding Skills)		
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday	VAC(C Coding Skills)			

Sub. Code	Sub.Shortform	Subjects	Speaker Name
	C Coding Skills	C coding Skills	Geetha .M.A

HOD-CE

C Coding -Course Structure

Course Objective: The objective of the course is to equip the student with problem solving skills using C Language.

Course Outline: The students are made to write C programs on their own for sets of both mathematical and other engineering problems after exposing them to the different constructs of C language namely Input/output, assignments, iteration and control structures. Basic understanding of File handling using c, Structures and Unions.

Syllabus:

1. Introduction of C Language, Real time applications of C language, Introduction to the structure of C program, Input/output formatting using scanf and printf functions.
2. Basics of C language , C-tokens, Variables and basic datatypes.
3. Different types of Operators like Arithmetic, relational, and logical operators, Increment and decrement operators, conditional, assignment, bitwise and special operators.
4. Introduction to Conditional statements- Simple-if and if-else statement, Else-if ladder statement, Nested – If and Switch case statement.
5. Description of Various Looping Structure- While loop statement, For loop statement, Do-while loop statement
6. Functions –Basic concepts, Types, Categories of functions, Recursive Function – Introduction, Examples
7. Introduction to Arrays- 1D Arrays, 2 D Arrays, linear search, binary search and basic sorting technique using bubble sort
8. Introduction to Strings, description and use of various string functions of string library
9. Introduction to pointers and basic File operations
10. Introduction to structures and unions

Session Plan

Session1: Introduction to C Programming language, Structure of C program and basic Input/Output operations using Scanf and Printf functions.

Session2: Basics of C Language – Tokens, Data Types

Session 3: Practice on basics of data types, variables and I/O functions

Session 4: Arithmetic, relational, and logical operators, Increment and decrement operators, conditional, assignment and special operators.

Session 5: Practice session on Arithmetic, relational, and logical operators

Session 6: Practice session on, Increment and decrement operators, conditional, assignment and special operators.

Session 7: Special Operators, Operator's precedence, operators associativity, Expression evaluation rules.

Session 8: Bit- wise operators.

Session 9: Practice on Bitwise operators

Session 10: Simple-if and if-else statement

Session 11: Practice Session on simple if and if-else statement

Session 12: Else-if ladder statement, Nested – If and Switch case statement.

Session 13: Practice session on simple Else-if ladder, , Nested – If and Switch case

Session 14: While loop statement, For loop statement, Do-while loop statement

Session 15: Practice session on all loops

Session 16: Functions –Basic concepts, Types, Categories of functions

Session 17: Practice session on functions

Session 18: Recursive Function – Introduction, Examples

Session 19: Recursive Function – practice

Session 20: Arrays – 1 Dimensional array

Session 21: Practice session on Arrays

Session 22: Linear search, Binary Search, Sorting on arrays

Session 23: Practice session on searching and sorting of arrays

Session 24: Arrays – 2 Dimensional array

Session 25: Introduction to strings , basic String functions

Session 26: Practice of strings and String Functions

Session 27: Introductions to Pointers and Redirecting I/O – Files & File Operations.

Session 28: Practice problems on File operations

Session 29: Introduction to Structures and Unions

Session 30: Practice session on structure

GRIET/ /G/21-22

EVENT SUMMARY REPORT

<table>
<tr><td>Griet /Other institutes/Organization Address:</td><td colspan="5">GRIET</td></tr>
<tr><td rowspan="2">Department</td><td rowspan="2">Civil Engineering</td><td colspan="2">Professional Body</td><td colspan="2">Institutional Body</td></tr>
<tr><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td>Nature of the Event (Co & Extra Curricular Activities -Workshop / Seminar / Guest Lecture / Tech Talk/FDP/GD/ Training Program / Quiz / Any Prof. Body events/Presentation/Conference/ Industry Visit)</td><td colspan="5">Training Program</td></tr>
<tr><td>Title / Theme of the Event</td><td colspan="5">C Coding skills</td></tr>
<tr><td>Details of the Coordinator& Designation</td><td colspan="5">Dr. C. Lavanya,
Professor of Civil Engineering
GRIET.</td></tr>
<tr><td rowspan="2">Event Dates/Days</td><td>From</td><td>To</td><td colspan="3">No. of Days</td></tr>
<tr><td>21/02/2022</td><td>16/04/2022</td><td colspan="3">30</td></tr>
<tr><td>Details of the Speaker / Guest
Organization Address:</td><td colspan="5">Ms. Geeta Mahadeo Ambidhuke
Assistant Professor,
CSE, GRIET.</td></tr>
<tr><td rowspan="2">Participants
(Teaching Faculty / Non-Teaching Faculty / Students)</td><td>No.of Faculty</td><td>No. of UG students</td><td>No.of PG Students</td><td>No.of outside participants</td><td>Total Participants</td></tr>
<tr><td></td><td>77</td><td>-</td><td>-</td><td>77</td></tr>
<tr><td>Faculty Names & Designation</td><td colspan="5"></td></tr>
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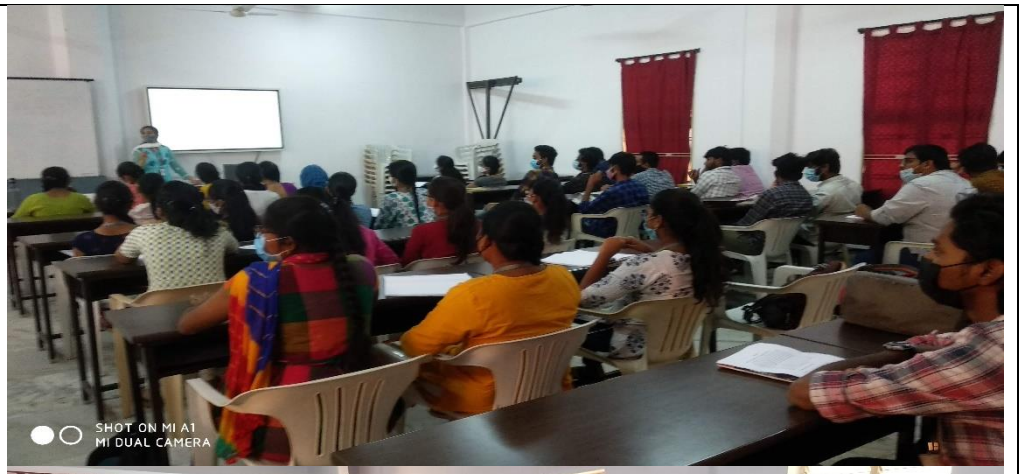
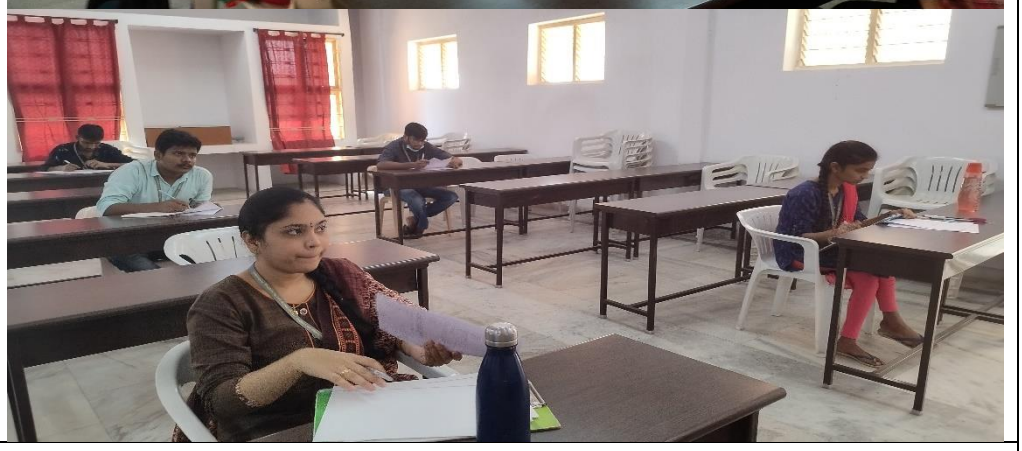
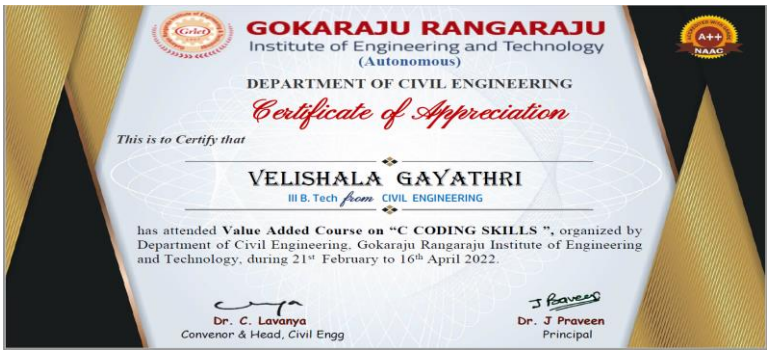
Summary of the Event	Discussion this point **1.** Introduction of C Language, Real time applications of C language, Introduction to the structure of C program, Input/output formatting using scanf and printf functions. 2. Basics of C language , C-tokens, Variables and basic datatypes. 3. Different types of Operators like Arithmetic, relational, and logical operators, Increment and decrement operators, conditional, assignment, bitwise and special operators. 4. Introduction to Conditional statements- Simple-if and if-else statement, Else-if ladder statement, Nested – If and Switch case statement. 5. Description of Various Looping Structure- While loop statement, For loop statement, Do-while loop statement 6. Functions –Basic concepts, Types, Categories of functions, Recursive Function – Introduction, Examples 7. Introduction to Arrays- 1D Arrays, 2 D Arrays, linear search, binary search and basic sorting technique using bubble sort 8. Introduction to Strings, description and use of various string functions of string library 9. Introduction to pointers and basic File operations 10. Introduction to structures and unions
IRG (in rupees**)** **Deposited A/C no A/C name and date and other details** **(enclose proof-A/C statement)**	
Expenditure (in rupees**)** **(Enclose proof-bills)**	
POs attained with this Event (number and description)	1. Apply knowledge of mathematics, science and fundamentals of Civil Engineering. 2. Analyse problem and interpret the data. 4. Identify, formulate, analyze and interpret data to solve Civil Engineering problems. 6. Understand the impact of engineering solutions in a global, economic and societal context. 9. Work effectively as an individual or in a team and to function on multi disciplinary context. 10.Communicate effectively with engineering community and society.

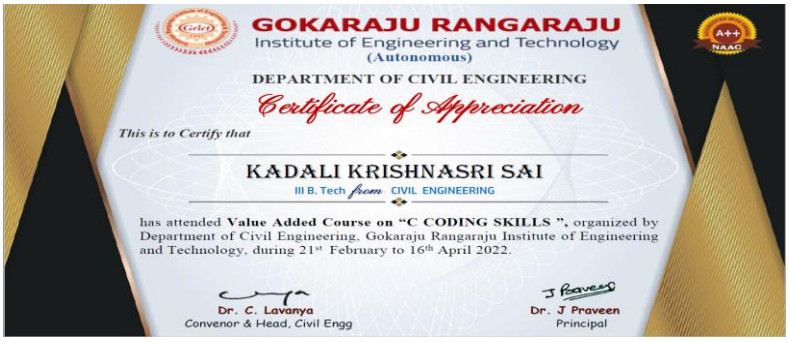
Photographs of the event
(Hard copy and Soft copy)





Proofs:
1.Certificates copies
2.Profile of Speaker
3.PPT/Material as applicable. etc.,


GOKARAJU RANGARAJU
Institute of Engineering and Technology
(Autonomous)
DEPARTMENT OF CIVIL ENGINEERING
Certificate of Appreciation
This is to Certify that
VELISHALA GAYATHRI
III B. Tech from CIVIL ENGINEERING
has attended **Value Added Course on "C CODING SKILLS "**, organized by Department of Civil Engineering, Gokaraju Rangaraju Institute of Engineering and Technology, during 21st February to 16th April 2022.
Dr. C. Lavanya
Convenor & Head, Civil Engg
Dr. J Praveen
Principal


GOKARAJU RANGARAJU
Institute of Engineering and Technology
(Autonomous)
DEPARTMENT OF CIVIL ENGINEERING
Certificate of Appreciation
This is to Certify that
KADALI KRISHNASRI SAI
III B. Tech from CIVIL ENGINEERING
has attended **Value Added Course on "C CODING SKILLS "**, organized by Department of Civil Engineering, Gokaraju Rangaraju Institute of Engineering and Technology, during 21st February to 16th April 2022.
Dr. C. Lavanya
Convenor & Head, Civil Engg
Dr. J Praveen
Principal

Signature of Coordinator

Signature of HOD