

One Week Faculty Readiness Program On

“Programming for Problem Solving using C-Language”

On

01-06-2026 to 06-06-2026

Organized By

Department of Computer Science and Engineering

NARSIMHA REDDY ENGINEERING COLLEGE

(Autonomous)

HYDERABAD-500100

Title of The Event	“Programming for Problem Solving using C-Language”
Resource Person	Dasari Koteswara Rao HOD-Cyber Security
Event Convenor Details	Dr. N. Rajasekhar DEAN- EXTERNAL AFFAIRS, NRCM
Program Type*	FRP
Start Date : End Date : Duration of the activity :	9.30 AM to 04.00 PM
Mode of Session	Offline
Number of Faculty Participants *	11
Objectives of the FRP	<p>Objectives of the FRP on “Programming for Problem Solving using C-Language”</p> <ul style="list-style-type: none"> • To strengthen the fundamental concepts of programming and problem-solving approaches among faculty members. • To enhance the understanding of C programming fundamentals including data types, operators, control structures, functions, and program development techniques. • To develop logical thinking and algorithmic skills required for designing efficient programming solutions. • To improve proficiency in writing, debugging, and optimizing C programs through hands-on practice sessions. • To provide practical exposure to arrays, strings, pointers, structures, and dynamic memory concepts in C programming. • To enable faculty members to effectively teach PPS concepts using improved pedagogical methods and real-time examples. • To enhance knowledge of problem-solving methodologies such as algorithm design, flowcharts, and structured programming techniques. • To familiarize participants with advanced programming practices including file handling, searching, and sorting techniques. • To bridge the gap between theoretical concepts and practical implementation through coding exercises and assessments. • To improve faculty confidence in conducting programming laboratories and guiding students in coding practices. • To encourage innovative teaching approaches using active learning, coding activities, and application-based examples. • To promote continuous professional development and technology upgradation among faculty members. • To prepare faculty members to train students for industry-oriented programming skills and competitive programming requirements. • To create a collaborative learning environment where faculty members share knowledge, experiences, and best practices.

	<ul style="list-style-type: none"> • To enhance the overall quality of teaching and learning outcomes in Programming for Problem Solving courses.
Outcomes of FRP/ Benefit in terms of learning/Skill/Knowledge obtained	Outcomes of the FRP on “Programming for Problem Solving using C- Language”

	<ul style="list-style-type: none"> ➤ Faculty members gained a strong understanding of fundamental programming concepts and problem-solving methodologies. ➤ Participants developed improved skills in algorithm design, flowchart preparation, and logical thinking for solving computational problems. ➤ Faculty members enhanced their proficiency in C programming concepts including variables, data types, operators, and control structures. ➤ Participants gained practical experience in developing, compiling, debugging, and executing C programs effectively. ➤ Faculty members improved their ability to teach arrays, strings, functions, pointers, structures, and dynamic memory concepts with practical examples. ➤ Participants acquired knowledge of searching and sorting techniques and their applications in programming problems. ➤ Faculty members developed confidence in conducting programming laboratory sessions and mentoring students in coding practices. ➤ Participants learned effective teaching strategies and activity-based approaches for delivering PPS concepts. ➤ Faculty members enhanced their ability to design real-time programming examples and application-oriented problems for classroom teaching. ➤ Participants improved their debugging and analytical skills to identify and resolve programming errors efficiently. ➤ Faculty members gained exposure to industry-relevant programming practices and coding standards. ➤ Participants developed skills to prepare students for competitive programming and technical assessments. ➤ The FRP promoted collaborative learning, knowledge sharing, and professional interaction among faculty members. ➤ Faculty members became better equipped to align PPS course delivery with outcome-based education (OBE) practices. ➤ The program contributed to improving the overall quality of teaching, student engagement, and learning outcomes in programming courses.
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Brief Report:

A One-week FRP on “**Programming for Problem Solving using C-Language**” was successfully conducted at **NARSIMHA REDDY ENGINEERING COLLEGE (Autonomous)**, Hyderabad on 1st to 6th June 2026. The workshop was organized by the CSE department under the guidance of Dr. N. Rajasekhar.

1. Introduction

The Department of Computer Science and Engineering (CSE) organized a **Faculty Readiness Program (FRP) on Programming for Problem Solving (PPS)** to enhance the programming knowledge, problem-solving skills, and teaching effectiveness of faculty members. The program was designed to strengthen the foundation of C programming concepts and improve the confidence of faculty members in delivering PPS courses effectively.

2. Program Details

Program Title: Faculty Readiness Program (FRP) on Programming for Problem Solving (PPS)

Duration: One Week (from 1st to 6th June 2026)

Resource Person: Dr. D. Koteswara Rao

Department: CSE (CS)

Venue: Tech Park

Participants: Faculty Members from various departments

3. Objectives of the Program

The primary objective of the FRP was to provide faculty members with comprehensive knowledge of programming fundamentals and problem-solving techniques. The program focused on strengthening concepts such as algorithms, flowcharts, C programming constructs, arrays, strings, functions, pointers, structures, dynamic memory management, file handling, searching, and sorting techniques. The program also aimed to enhance teaching methodologies by integrating practical examples, hands-on coding sessions, and industry-oriented approaches.

4. Activities Conducted

During the program, interactive sessions, coding demonstrations, practical exercises, discussions, and assessments were conducted. Faculty members actively participated in hands-on programming activities and explored effective approaches for teaching PPS concepts.

The sessions covered:

- Overview of C Programming and Problem-Solving Approaches
- Arrays and Strings
- Functions and Pointers
- Structures, Unions, and Dynamic Memory Management
- File Handling Concepts
- Searching and Sorting Techniques
- Programming Practices and Debugging Techniques

5. Outcomes of the Program

The FDP enabled participants to:

- Improve their programming knowledge and logical thinking skills.
- Develop effective algorithms and structured programming solutions.
- Gain confidence in writing, debugging, and optimizing C programs.
- Adopt innovative teaching practices for PPS courses.
- Connect theoretical concepts with practical implementation.
- Enhance laboratory instruction and student mentoring abilities.

6. Participant Performance

The participants demonstrated excellent enthusiasm, dedication, and active involvement throughout the program. Regular assessments and practical activities helped faculty members evaluate their understanding and improve their programming skills.

The top performers were recognized for their outstanding performance, while all participants were appreciated for their commitment and continuous learning attitude.

7. Conclusion

The Faculty Readiness Program on Programming for Problem Solving was successfully completed with active participation and positive feedback from faculty members. The program provided an excellent platform for knowledge sharing, skill enhancement, and professional development.

The FDP concluded with a valedictory session where appreciation was expressed to the management, organizers, coordinators, and all participants for their valuable support and cooperation.

Poster/ Brochure of the Event



NARSIMHA REDDY ENGINEERING COLLEGE

(UGC Autonomous)

FACULTY READINESS PROGRAM (FRP)

on

PROGRAMMING FOR PROBLEM SOLVING (C PROGRAMMING)

ONE WEEK – FRP SCHEDULE

RESOURCE PERSON



Dr D Koteswara Rao
HOD,
CSE (CS)



DATES

1st June 2026 – 6th June 2026



TIMINGS

9:30 AM – 4:00 PM (Each Day)



VENUE

Lab-1, 3rd Floor, Tech Park



OBJECTIVE

Enhancing Faculty Skills in C Programming for Effective Teaching & Problem Solving

DAY	TOPIC & FOCUS	KEY CONTENTS	KEY TAKEAWAYS
DAY 1	Overview of C	<ul style="list-style-type: none"> Data Types, Variables, Operators Expressions & Structure of C Program Input & Output Statements Control Statements & Sample Programs 	<ul style="list-style-type: none"> Understand basics of C language Write simple C programs Use control statements effectively
DAY 2	Arrays & Strings	<ul style="list-style-type: none"> Introduction to Arrays & Types Creating, Accessing & Manipulating Arrays String Basics & String Library Functions Sample Programs 	<ul style="list-style-type: none"> Work with arrays effectively Use string functions in programs Solve problems using arrays & strings
DAY 3	Functions & Pointers	<ul style="list-style-type: none"> Basic & Categories of Functions Parameter Passing Techniques Recursive Functions Pointers Basics & Pointer Arithmetic Sample Programs 	<ul style="list-style-type: none"> Design modular programs using functions Implement recursion Understand and use pointers in C
DAY 4	Structures, Unions & Dynamic Memory Management	<ul style="list-style-type: none"> Creating Structures & Accessing Elements Creating Unions Dynamic Memory Allocation (malloc, calloc, realloc, free) Sample Programs 	<ul style="list-style-type: none"> Use structures & unions effectively Manage memory dynamically Implement efficient programs
DAY 5	Files and Searching Techniques	<ul style="list-style-type: none"> Introduction to Files & File I/O Linear Search Binary Search Sample Programs 	<ul style="list-style-type: none"> Perform file operations Implement linear & binary search Solve problems using search techniques
DAY 6	Sorting Techniques	<ul style="list-style-type: none"> Bubble Sort Insertion Sort Selection Sort Sample Programs 	<ul style="list-style-type: none"> Implement sorting algorithms Compare efficiency of different sorts Apply sorting in real-world problems

WHAT YOU WILL GAIN



Stronger Fundamentals of C Programming



Hands-on Coding Practice



Problem Solving Approach

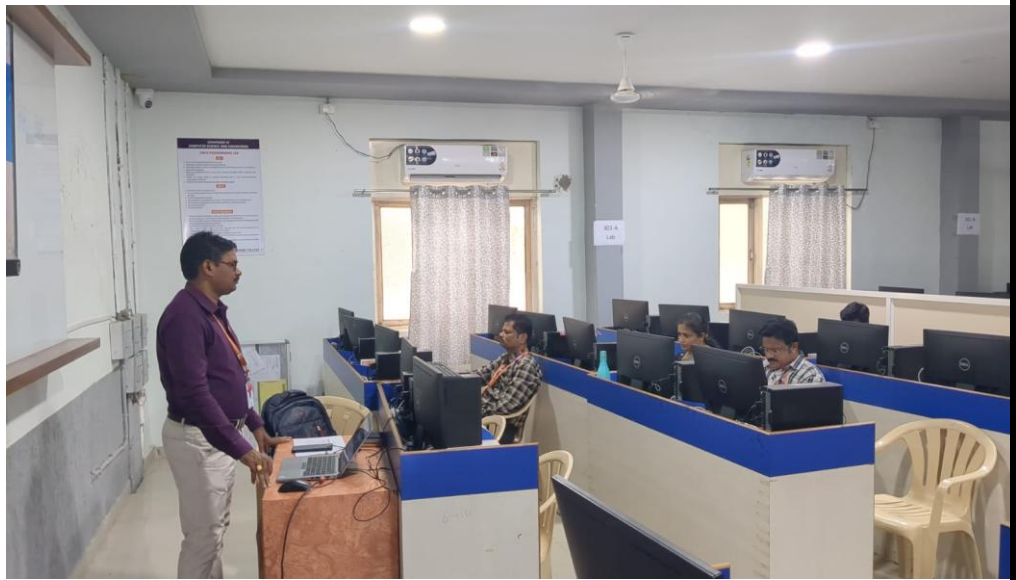


Improved Teaching Effectiveness

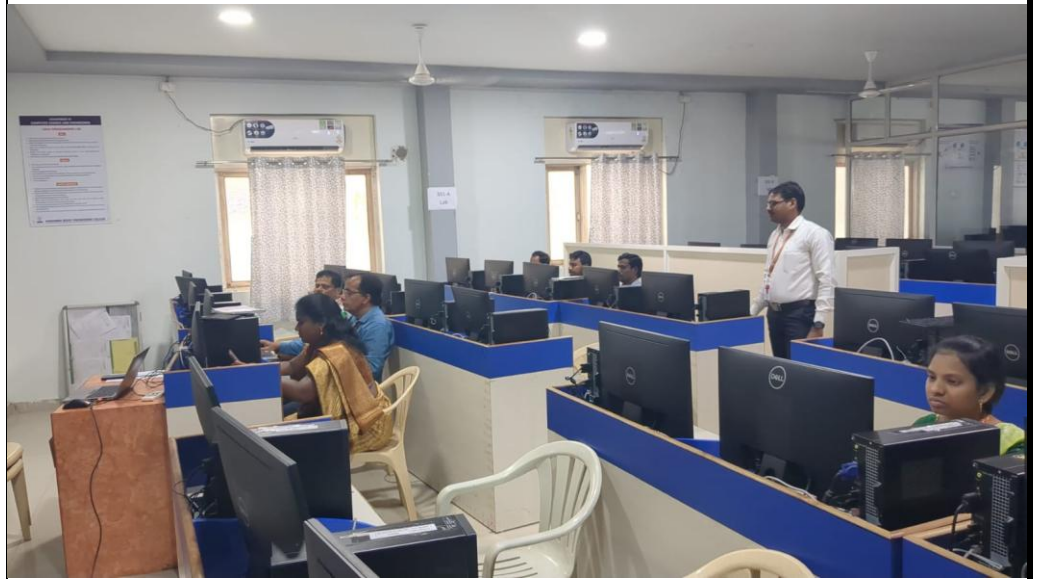



★★ Let's Code, Solve & Create a Better Future! ★★

Event Photograph



Event Photograph & Grand Test Results






NRCM
your roots to success...

FRP – PPS (C PROGRAMMING)

GRAND TEST RESULTS

★ Congratulations to All Participants! ★

RESOURCE PERSON



Dr D Koteswara Rao
HOD,
CSE (CS)

S.No	Name of the Participant	Dept	Score (Out of 120)	Marks %	Grade
1	Srilakshmi Cherukuri	CSE	117 / 120	97.50	A+
2	Swarna Emmadi	AIML	116 / 120	96.67	A+
3	Prasanna Kumari Panamala	CSE(CS)	114 / 120	95.00	A+
4	DR G SESHADRI	CSE(CS)	113 / 120	94.17	A+
5	Dr.Ch.Mohana Rao	Mechanical Engg	112 / 120	93.33	A+
6	M Nageswara Rao	AIML	91 / 120	75.83	A
7	Dr. P. Venkat Rao	FME	78 / 120	65.00	B
8	S udaya Pavan	AIML	71 / 120	59.17	C

PROGRAM
FRP – PPS
(C PROGRAMMING)

TEST
Grand Test

TOTAL PARTICIPANTS
8

MAX SCORE
120 / 120

TOPPER

Srilakshmi Cherukuri
117 / 120 (97.50%)
A+

RUNNER-UP

Swarna Emmadi
116 / 120 (96.67%)
A+

HIGH ACHIEVEMENT
4 Participants scored above 95% (A+ Grade)

STRONG PERFORMANCE
All participants showed great effort and participation


OVERALL PERFORMANCE
Excellent understanding and application of C Programming concepts

KEY TAKEAWAY

Participants demonstrated excellent problem-solving skills and a deep understanding of C Programming concepts including data types, control structures, functions, arrays and pointers.

Keep Learning. Keep Growing!

NARSIMHA REDDY ENGINEERING COLLEGE
(UGC AUTONOMOUS)



★★ Empowering Minds... Building Futures! ★★

*****~End of the Report~*****