

#### CIRCULAR

27.11.2017

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Embedded C** for the benefit of II, III and IV year students. This course is scheduled from 01.12.2017 for 30hours which includes theory and practical. The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	Name of the Faculty	Designation		
1	Dr. K.P. Kaliyamurthie	Professor		
2	Dr. G.Micheal	Professor		

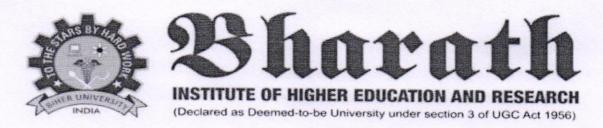
Head of Department

To

Copy to CSE

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HEAD OF DEPARTMENT
Department of Computer Scic & Engg.,
Bharath Institute of Higher Education & Research
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Chennai-600 073, INDIA



## CERTIFICATE COURSE ON EMBEDDED C

Date of Introduction of the Course: 15.11.20217

## **COURSE OBJECTIVES**

Dive into the world of development by learning c language concepts and implementing them in codes. Embedded Ccourse provides a Step by step guide to c programming language for beginners to master in C. Fine tune your coding skills and ideas into applications by learning c in a systematic way and make a strong foundation for embedded systems and more advanced language.

### **WHAT TO EXPECT**

Expertise The coding skills in C/Embedded C and learn the core concepts to get started as a developer.

- → Develop programs in C/Embedded C in a structured approach
- → Get complete idea of C/Embedded C from fundamentals
- → Build applications using the core concepts
- → Master your coding skills In a professional way
- → Develop code debugging skills and solve the issues in your code
- → Build the base for other programming languages and embedded programming
- → Stand out in the development field and build a carrier in programming

# **COURSE SYLLABUS**

#### 1. Introduction

- C language overview
- Need for C
- Embedded C.
- C vs Embedded C

#### 2. Environment Set up

- > Text editor and compiler
- Code Blocks
- Discuss Compilers used for Embedded systems

#### 3. Structure of C Program

- > The C Pre-processor
- Global and local declaration
- Keywords & Identifier
- Variables & Constants

## 4. Storage classes and Data types

- > Different Storage classes and their uses
- > Different Data types and memory they use in GCC.
- > Comparison of memory used by each data type in different compiler

#### 5. Input s and outputs

- > Input and Output Functions
- > Escape sequence
- > Format specifier

#### 6. Operators

- > Arithmetic Operators, Post increment and Pre increment.
- Relational Operators and Assignment Operators
- Logical Operators and Bitwise Operators

#### 7. Conditional Statements

- > If
- > If- Else
- > Nested if Else
- > Switch Case.

## 8. Loops

- > For Loop
- While loop and Do-while Loop

#### 9. Arrays and String

- > Arrays
- String and String Functions

#### 10. Functions

- What is a Function in C
- Passing Values between Functions
- Recursive Function and Stack memory

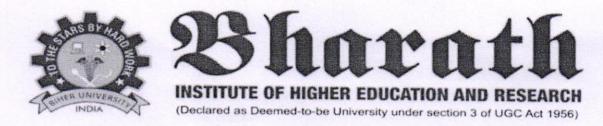
#### 11. Pointers

- > Pointer operations.
- Call by Value and Call by Reference
- Passing array to function using pointer.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Date of Introduction of the Course: 27.11.20217

The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN).

# Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	01-12-	1. Introduction
	2017(AN)	C language overview
3,4	01-12-2017	> Need for C
	(AN)	Embedded C.
	02-12-	C vs Embedded C
	2017(FN)	
5,6	02-12-	2. Environment Set up
	2017(FN)	Text editor and compiler
7,8	02-12-2017	> Code Blocks
	(FN)	Discuss Compilers used for Embedded
	02-12-	systems
	2017(AN)	
9,10	02-12-2017	3. Structure of C Program
	(AN)	The C Pre-processor
11,12	08-12-2017	Global and local declaration
	(AN)	Keywords & Identifier
		Variables & Constants
13,14	08-12-2017	4. Storage classes and Data types
	(AN)	Different Ct.
	09-12-2017	<ul> <li>Different Storage classes and their uses</li> <li>Different Data types and memory they</li> </ul>
	(FN)	use in GCC.
		Comparison of memory used by each
		data type in different compiler
15,16	09-12-2017	5. Input s and outputs
	(FN)	Input and Output Functions
		<ul><li>Escape sequence</li><li>Format specifier</li></ul>
		romat specifier
17,18	09-12-2017	6. Operators

	(FN) 09-12-2017 (AN)	<ul> <li>Arithmetic Operators ,Post increment and Pre increment.</li> <li>Relational Operators and Assignment Operators</li> </ul>
19,20	09-12-2017 (AN)	Logical Operators and Bitwise Operators
21,22	15-12-2017 (AN)	7. Conditional Statements  > If  > If- Else  > Nested if Else  > Switch Case.
23,24	15-12-2017 (AN) 16-12-2017 (FN)	<ul> <li>8. Loops</li> <li>For Loop</li> <li>While loop and Do-while Loop</li> </ul>
25,26	16-12-2017 (FN)	<ul> <li>9. Arrays and String</li> <li>➤ Arrays</li> <li>➤ String and String Functions</li> </ul>
27,28	16-12-2017 (FN) 16-12-2017 (AN)	<ul> <li>10. Functions</li> <li>➤ What is a Function in C</li> <li>➤ Passing Values between Functions</li> <li>➤ Recursive Function and Stack memory</li> </ul>
29,30	16-12-2017 (AN)	<ul> <li>11. Pointers</li> <li>➤ Pointer operations.</li> <li>➤ Call by Value and Call by Reference</li> <li>➤ Passing array to function using pointer.</li> </ul>

COURSE COORDINATOR

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Chennal-600 073. INDIA



# **CERTIFICATE COURSE ON EMBEDDED C Date of Introduction of the Course: 27.11.2017**

# School of Computing Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U16CS024	SRIMATHI S
2	U16CS025	SANTHOSHKUMAR S
3	U16CS026	AJAY KUMAR R
4	U16CS027	GARLAPATI RAGHURAM
5	U16CS028	PADILAM JAYANTH YADAV
6	U16CS029	MOHAMMED KHIZER HUSSAIN N
7	U16CS030	JEEVAMEDHA M
8	U16CS031	SYED HAFEEZ HUSSAIN
9	U16CS032	MUGESH P
10	U16CS033	POOJALAKSHMI N
11	U16CS034	GUNDU NIKITHA REDDY
12	U16CS035	RESHMA R
13	U16CS036	LAKSHMI NARAYANAN A
14	U16CS037	PALLE NAZEER VALI
15	U16CS038	GOLUSULA SAI KUMAR
16	U16CS039	PATTAN FEROZ KHAN
17	U16CS040	MOHAMMAD AHAMAD ALIKHAN
18	U16CS041	LAAVANYA GA
19	U16CS070	BANDIATMAKUR MADANMOHAN REDDY
20	U16CS071	MULINTY PRASHANTH REDDY
21	U16CS072	GAVIREDDY SIVAMOHAN REDDY
22	U16CS073	MASHETTY SOUMITH
23	U16CS074	KASANI AKHIL YADAV
24	U16CS075	BASA RAMANJI NAIDU
25	U16CS076	ARVIND S

26	U16CS077	A VINOOTHINA
27	U16CS078	AISHWARYA KUSHWAHA
28	U16CS079	VEGI BALAJI SATYA SAI GANESH
29	U16CS080	KALAHASTI MUNIJYOSHNA
30	U16CS081	KADIVETI AJAY REDDY
31	U16CS082	ADURI SHYAM SAI KUMAR
32	U16CS083	KOTHAKOTA SAI SIRISHA
33	U16CS084	BAIRISETTI VENTATESH
34	U16CS129	MANDIPALLI CHIDANANDA REDDY
35	U16CS130	NANDALLURI REDDYBASI REDDY
36	U16CS131	MAGULURI PAVAN
37	U16CS132	GAIKOTI MADHAVA RAO
38	U16CS188	DEBANJAN MANDAL
39	U16CS189	CHAUHAN MAYANK SUNILKUMAR
40	U16CS190	KONDAMURI KIRAN KUMAR
41	U16CS191	SHAIK AFRIDI
42	U16CS192	GANTLA VASU
43	U16CS193	MUNAGANURU SAI ANUDEEP
44	U16CS195	BOLLAM MANINDRA
45	U16CS196	RAMADUGU ANUSHA
46	U16CS112	INTURI RAGHU BABU
47	U16CS113	PALLE SUDHEER KUMAR REDDY
48	U16CS114	BANGARAPU MANOJ KUMAR REDDY
49	U16CS115	BHUMIRDDY MAHITHA
50	U16CS116	YELLAPUREDDY REPARENDAR REDDY

COURSE COORDINATOR

HOD(CSE)

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# 23 harath Institute of Higher Education and Research

Certificate of Participation

This is presented to

Jeya Ganesh MD

For actively participating in the value added course "Embedded C Programming" Conducted by School of Computing, BIHER from 01.12.2017 to 16.12.2017.

COURSE COORDINATORS

**HEAD OF THE DEPARTMENT** 

DIRECTOR

COURSE FEEDBACK FORM

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I.	Inform	nation on t	he Respo	ondent: (7	Γick (√)	Appropria	tely)					V /		
						••••								
1.	Percer	itage of cla	sses atte	nded										
	0-20		20	0-40		40-60			60-80	1	1 80-100			
2.		Number of hours per week spent on the course (Other than lecture hours)												
	0-2		2-	-4		4-6			6-8		8-10		1	
3.	Puerra	ration for	he cours	a hy tha	etudont.									
3.	(i)	reparation for the course by the student:												
	(ii)	Have done part of this course earlier  Has adequate prior exposure to the prerequisites									N			
	(iii)										No			
	(iv)									•	<u>γ</u> ες			
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4.	The ex	e expectations for taking the course by the student are:												
	(a)	Enhance by skill base in the area of specializations									YES			
	(b)	Get exposed to a relevant subject									YES			
	(c)	Curiosity	У								YES			
	(d)	Better E	mployme	nt Opport	Oitit							450		
(e) Complete Course requirements								YES						
	(f)		ove CGP								Y	58		
Abo	ut the Ir	structor: I	nformat	ion on th	e Respo		k (√) Appro	priately					<u> </u>	
						A	В		С		D		E	
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2.	Comn	ment of the Subject				1								
3.	Clarit	y of expression				1								
4.	Level	evel of preparation					1							
5.	Level	Level of interaction				1								
6.	Acces	sibility out	side the c	lass			1							
7.		s (please sp				1								
			B: Very	Cood	-	C: Good		D. Sa	tisfactory		F	: Poor		
A: I	Excellent	/	B: very	Good		C. G000		D. Sa	distactory		-	. 1 001		

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