

COLLEGE OF ENGINEERING AND TECHNOLOGY

Thirupachur-631203, Tiruvallur TK & DT
Approved by AICTE New Delhi & Affiliated to Anna University, Chennai
(A Telugu Minority Institution)

19EEEVAC02 - EMBEDDED SYSTEM DESIGN USING ARDUINO

EVENT REPORT

Name of the Course: EMBEDDED SYSTEM DESIGN USING ARDUINO

Name of the Instructor: Mr.M. Namachivayam AP/EEE/SVCET

Mr.P. Justin Raj AP/EEE/SVCET

Year and Branch: II, III IV & ME-PED - ELECTRICAL AND ELECTRONICS ENGINEERING

Duration of Course: 32 Hrs (02.03.2020 to 07.03.2020)

SUMMARY OF THE EVENT:

The Course was inaugurated on **02.03.2020** at 8.30 am by our respectable Principal and HOD. As per the Course plan session was started and went smooth for the Remaining days. On the last day **07.03.2020** by 12.30 pm the course was Completed Successfully.

During the Six Days of the program Students were participated with enthusiasm and they finally gained Knowledge on "Embedded system Design using ARDUINO"

ASSESMENT MODE:

No of Students Enrolled: 107

No of Students appeared: 107

Date of Exam: 07.03.2020

Scheme of Exam: Offline

No of Students Passed: 107

OUTCOME:

After the completion of the Course, the student can apply knowledge of Embedded System in Engineering Field, apply Concept of Embedded-C Concept of C language in Engineering Field, Design basic Sensors and Actuators Using Arduino, to gain Knowledge of different Micro-controllers Architectures

Coordinator

(Mrs.S.S.Divya

HOD / EEE

(Mr.M.Namachivayam)

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Engineering and Rechnology, Inirupachur, Thiruvallur - 631 203



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19EEEVAC01 - EMBEDDED SYSTEM DESIGN USING ARDUINO

TEST QUESTIONS

- 1. Which memory storage is widely used in PCs and Embedded Systems?
- a) EEPROM
- b) Flash memory
- c) SRAM
- d) DRAM
- 2. Which activity is concerned with identifying the task at the final embedded systems?
- a) scheduling
- b) task-level concurrency management
- c) high-level transformation
- d) compilation
- 3. Which of the following helps in reducing the energy consumption of the embedded system?
- a) emulator
- b) debugger
- c) simulator
- d) compilers
- 4. Identify the standard software components that can be reused in an embedded system design? a) memory
- b) application software
- c) application manager
- d) operating system
- 5. Which of the following offers external chips for memory and peripheral interface circuits?
- a) Embedded system
- b) Peripheral system
- c) Microcontroller
- d) Microprocessor
- 6. Which of the architecture is more complex? a) MC68 Phirupach



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- b) MC68030
- c) SPARC
- d) 8086
- 7. Which of the following statements are true for von Neumann architecture?
- a) separate bus between the program memory and data memory
- b) external bus for program memory and data memory
- c) external bus for data memory only
- d) shared bus between the program memory and data memory
- 8. Which provides the TCP/IP communication over the Ethernet and FDDI?
- a) pNA+ network manager
- b) PSOS+
- c) pSOS+ kernel
- d) pSOS+m
- 9. What is Arduino?
- a) Programming language
- b) Image editing software
- c) Open-source electronics platform
- d) Text editor
- 10. What language is the Arduino IDE built on?
- a) Java
- b) HTML
- c) C/C++
- d) Python
- 11. What is the use of the Arduino header file?
- a) It enables the programmer to access all of Arduino's core functionality
- b) It doesn't have any use and can be omitted at any point of time in the code
- c) It gives root access to the microcontroller's file system
- d) It shows other people to create libraries for the Arduino code

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- 12. Which Arduino Board contains an onboard joystick?
- a) Arduino Nano
- b) Arduino UNO
- c) Arduino Esplora
- d) Arduino Due
- 13. What is the full form of EEPROM?
- a) Electrically Encoded Programmable Read Only Memory
- b) Encrypted Electronic Programmable Read Only Memory
- c) Electrically Erasable Programmable Read Only Memory
- d) Electronic Embedded Programmable Read Only Memory
- 14. What is the use of the SD.h Library in Arduino?
- a) To communicate with the computer
- b) To communicate with the internet
- c) To communicate with the SD Card Module
- d) To communicate with another microcontroller
- 15. What is the use of the Interrupt Service Routine in an Arduino?
- a) To boot up the Arduino
- b) To exit any code that is running
- c) To automate functions
- d) To make more memory
- 16. Which of the following processors can perform exponential, logarithmic and trigonometric functions?
- a) 8086
- b) 8087
- c) 8080
- d) 8088
- 17. Which of the following processors execute its instruction in a single cycle?

a) 8086

b) 8088

c) 808



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- d) MIPS R2000
- 18. What is CAM stands for?
- a) content-addressable memory
- b) complex addressable memory
- c) computing addressable memory
- d) concurrently addressable memory
- 19. Which is the most basic non-volatile memory?
- a) Flash memory
- b) PROM
- c) EPROM
- d) ROM
- 20. Which of the following has programmable hardware?
- a) Microcontroller
- b) microprocessor
- c) coprocessor
- d) FPGA

COORDINATOR

(Mrs.S.S.Divya)

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HOD / EEE

(Mr.M.Namachivayam)

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19EEEVAC02 - EMBEDDED SYSTEM DESIGN USING ARDUINO

TEST QUESTIONS

Student Reg. No. & Name: 112416105322 & Saravaran. K

Sem & Year: 08 &

- 1. Which memory storage is widely used in PCs and Embedded Systems?
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- b) Flash memory
- c) SRAM
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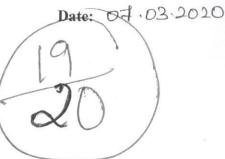
c) Microcontroller

Microprocessor

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- 6. Which of the architecture is more complex?
- a) MC68040
- b) MC68030
- s) SPARC
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- e) Open-source electronics platform
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- 10. What language is the Arduino IDE built on?
- a) Java

WHTML

- c) C/C++
- d) Python
- 11. What is the use of the Arduino header file?
- a) It enables the programmer to access all of Arduino's core functionality
- b) It doesn't have any use and can be omitted at any point of time in the code

c) It gives poor access to the microcontroller's file system



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- d) It allows other people to create libraries for the Arduino code
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- b) Arduino UNO
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- d) Arduino Due
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c) 8087

d) MIPS R2000

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- c) computing addressable memory
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- b) PROM
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d) ROM

- 20. Which of the following has programmable hardware?
- a) Microcontroller
- b) microprocessor
- c) coprocessor

A) FPGA





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19EEEVAC01 - EMBEDDED SYSTEM DESIGN USING ARDUINO

Course Code	19EEEVAC01		
Name of the Course	EMBEDDED SYSTEM DESIGN USING ARDUINO		
Duration of the Course	32 Hrs		
Academic Year	2019-2020		
Period of the Course	02.03.2020 to 07.03.2020		

STUDENT EVALUATION SHEET

s.no	YEAR	REGISTER NUMBER	NAMEOF STUDENTS	ATTENDANCE	MARK
1	II	112418105001	ASWIN.E	32	85
2	II	112418105002	BHARANIDHRAN.M	32	85
3	II	112418105003	BHARATHI C.K	32	80
4	II	112418105004	DHAYANITHI.G	32	85
5	II	112418105006	DINESH.B	32	90
6	II	112418105007	KARTHICK .D	32	85
7	II	112418105008	MOHAMMED JUNAID AHMED.N	32	85
8	II	112418105009	PRASANNA KUMAR.K	32	85
9	II	112418105010	RAKESH.R	32	85
10	II	112418105011	SHARAN.G	32	85
11	II	112418105012	TAMILVANAN.D	32	90
12	II .	112418105013	VENKATESAN.R	32	95
13	II	112418105014	VIJAYA KUMAR.S	32	90
14	II	112418105015	VINOTHINI.R	32	90
15	II	112418105016	YUVARAJ.N	32	85
16		112418105302	ANBARASAN A	32	80
17/5	COLLEGE	112418105304	BALAJI C	132	85
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S.NO	YEAR	REGISTER NUMBER	NAMEOF STUDENTS	ATTENDANCE	MARK
18	II	112418105305	BALAKUMARAN S	32	85
19	II	112418105306	DEEPAK D	32	80
20	II	112418105308	JAYASEELAN D	32	85
21	II	112418105310	PERUMAL G	32	80
22	II	112418105311	PRAGADEESHWARAN A	32	85
23	II	112418105312	RAMYA S	32	90
24	II	112418105313	SATHYA MOORTHY R	32	85
25	II	112418105314	SUBHAM THAKUR	32	85
26	II	112418105315	SUGUMARAN A	32	85
27	II	112418105316	SUSANTHIKA C	82	85
28	II	112418105317	VASANTH V	32	80
29	II	112418105318	VINOTH KUMAR M	32	85
30	III	112417105001	ANANDHA PRIYA.R	32	85
31	III	112417105002	AKASH.A	32	80
32	III	112417105003	AMMU.E	32	80
33	III	112417105004	ANAND.S	32	80
34	III	112417105005	CHANDRAMOULI.K	32	80
35	III	112417105007	DIVAKAR.K	32	80
36	III .	112417105008	GAYATHRI.V	32	95
37	III	112417105009	KIRUBAKARAN.G	32	85
38	III	112417105010	KISHOREKUMAR S	32	85
39	III	112417105011	MONISH.B	32	90
40	RHHOLL	913417105013	NAVANEETHA HALDER	32	90
41	ТЫнрас	1124 7105014	NAVEENA.P	PAL32	90



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S.NO	YEAR	REGISTER NUMBER	NAMEOF STUDENTS	ATTENDANCE	MARK
42	III	112417105015	PRADEEBAN.V	32	80
43	III	112417105017	PRAVEEN KUMAR.J	32	85
44	III	112417105018	RAMYA.J.C	32	95
45	III	112417105019	SNEHA.M	32	80
46	III	112417105020	SONA.S	, 32	85
47	III	112417105021	SUBATHRA.K.S	32	90
48	III	112417105023	SURESH KUMAR.R	32	8:0
49	III	112417105025	UMA MAHESHWARI.F	32	85
50	III	112417105026	VIGNESHWAR.D	32	80
51	III	112417105027	VIGNESHWARAN.R	32	85
52	III	112417105028	VIJAYESHWARAN.B	32	85
53	III	112417105029	VIKRAM.S	32	85
54	III	112417105301	AJAY KUMAR.K	32	80
55	III	112417105302	JENIPER.M	32	85
56	III	112417105303	KAMALAKKANNAN.V	32	85
57	III	112417105304	KARTHIRAVAN.D	32	90
58	III	112417105305	LAKSHMI PRASAD.D.I	M 32	90
59	III	112417105306	MAGESHWARAN.M	32	85
60	IV .	112416105001	AJITH KUMAR.E	32	85
61	IV	112416105002	ANUPRIYA.R	32	85
62	IV	112416105003	ARAVINDAN.R	32	80
63	IV	112416105004	DEEPA LAKSHMI.S	32	95
64	AN EVOLLE	112416105005	DINESHKUMAR.C	132	80
65	Thirupac	112 16105006	ELAKIYA.E	RINCIPAL 32	95



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S.NO	YEAR	REGISTER NUMBER	NAMEOF STUDENTS	ATTENDANCE	MARK
66	IV	112416105007	GANESAN.R	32	80
67	IV	112416105008	HARI KUMAR.K	32	85
68	IV	112416105009	INBAA MARI.M	32_	90
69	IV	112416105010	JAGAN.D	32	85
70	IV	112416105011	KARTHIKA.K	32	90
71	IV	112416105012	LAKSHMI.N	32	95
72	IV	112416105013	MOHANA PRIYA.S	32	90
73	IV	112416105014	NAVAJOTHI.R	32	95
74	IV	112416105015	PAVITHRA.A	32	90
75	IV	112416105016	PRABAVATHI.K	32	85
76	IV	112416105017	PUNITH KUMAR.R	32	80
77	IV	112416105019	RENUKA.R	32	80
78	IV	112416105020	SAKTHIVEL.T	32	95
79	IV	112416105021	SARANRAJ.D	32	80
80	IV	112416105022	SIVAKUMAR.B	32	80
81	IV	112416105023	VASANTH KUMAR.S	32	80
82	IV	112416105024	VEL.S	32	80
83	IV	112416105025	VIJAY.M	32	85
84	IV .	112416105301	ASHOK KUMAR P	32	85
85	IV	112416105303	BABU R	32	3D
86	IV	112416105304	BALAJI G	32	80
87	IV	112416105305	BALAJI O	32	85
88	ANIVOLLE	112416105308	GAJENDRAN G	82	90
89	Thirupade Pin: 631 2	112416105309	GOKULA KANNAN K	32	80



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S.NO	YEAR	REGISTER NUMBER	NAMEOF STUDENTS	ATTENDANCE	MARK
90	IV	112416105313	3 LOKESH.T	32	80
91	IV	112416105314	LOKESH KUMAR M	32	
92	IV	112416105315	MUNI SEKAR G	32	85
93	IV	112416105316	PRADEEP KUMAR.B	32	85
94	IV	112416105317		32	85
95	IV	112416105318	PRAVEEN KANNAN R	32	85
96	IV	112416105322	SARAVANAN K	32	85
97	IV	112416105324	SEKAR R B	32	95
98	IV	112416105701	SATHISH KUMAR K		80
99	ME- PED	112419415001	AJITH KUMAR R	32	80
100	ME- PED	112419415002	ANANTHI S	32	80
101	ME- PED	112419415003	NANDHINI M		85
102	ME- PED	112419415004	SRIRANJANI N	32	85
103	ME- PED	112418415001	ARCHANA K	32	90
104	ME- PED	112418415002	BHARATH M	32	90
105	ME- PED	112418415003	JOTHILAKSHMI		85
06	MF-	112418415004	MATHIAS RAJ M	32	85
07	MF-		SUDHA K		85

COORDINATOR

Thirupachur Pin: 631 203

(Mrs.S.S.Divya)

HOD / EEE

(Mr.M.Namachivayam)



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING CERTIFICATE OF PARTICIPATION

This is to certify that MHMs VINDTHINI. R (112418105015) UG/PG

Department of Electrical and Electronics Engineering has successfully completed

Value Added Course titled 'EMBEDDED SYSTEM DESIGN USING

ARDUINO ' held from 02.03.2020 to 07.03.2020

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This is to certify that Mr/Ms & U.DH.A. K. (112418415006) HG/PG

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CO-ORDINATOR

Thirupachur GG GG Pin: 631 203

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This is to certify that Mr/Ms SONA.S (112417-105020) UG/PG

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This is to certify that Mr/Ms DEEPA LAKSHMI (11241610.5004) UG/PG

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This is to certify that Mr/Ms SARAVANAN. K LII24.1610.5322.)..... UG/PG

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING **CERTIFICATE OF PARTICIPATION**

This is to certify that Mr/Ms SR.I.RANJANI...N. (112419415004) UG/PG

Department of Electrical and Electronics Engineering has successfully completed

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This is to certify that Mr/Ms ASWIN-E(1124/1810.5001) UG/PG

Department of Electrical and Electronics Engineering has successfully completed

Value Added Course titled 'EMBEDDED SYSTEM DESIGN'USING

ARDUINO ' held from 02.03.2020 to 07.03.2020

Pin: 631 20

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