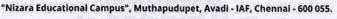


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ANNA UNIVERSITY COUNSELLING CODE: 1101



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Dated on: 2/9/2022

CIRCULAR

FACULTY MEMBERS AND STUDENTS

We have planned to conduct Value Added course in our department on the topic "ARDUINO" from 05/9/2022 to 20/9/2022 therefore, I request all the Faculty members and students to attend the course and make utilization of the course for your future.

Resource Person: **BALAMURGAN S** STANFORD INDIA BIODESIGN FELLOW SCHOOL OF INTERNATIONAL BIODESIGN AIIMS NEW DELHI

Permitted to organize the above Stated
Programme during the above Stated
Period
Period
2/9/2022 A. A. Detertize

Prof. Dr. A.S.SALMA BANU HoD/ECE

SALEGH . CHENNAL 600 955

AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING

Governing To Knowledge

AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING

ARDUINO

05/09/22 to 20/09/22

Timing:4.00-6.00p.m.-Week Days

4:00-7:00 Pm on Saturday's









RESOURCE PERSON
Bala Murugan. S
Standford- India
Bio design fellow
School of International Bio design
AIIMS, New Delhi.

PRINCIPAL AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING

Alhaj.S.Segu Jamuludeen Secretary & Correspondent

Prof. Dr.A. S. Salma Babu Prof. Dr. S. Sathish HOD/ECE Principal



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"Nizara Educational Campus", Muthapudupet, Avadi - IAF, Chennai - 600 055.

ANNA UNIVERSITY COUNSELLING CODE: 1101



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING VALUE-ADDED COURSE-SUMMARY REPORT

COURSE NAME: ARDUINO

Date: 05/09/2022 to 20/09/2022

Time: Week Days: 4:00 pm to 6:00 pm

Saturday's: 4.00 pm to 7.00 pm

No. of days: 14 No. of Modules: 5 Course Hours: 30

Mode of Conduction: Offline Speaker: S. BALAMURGAN

Student Certified: 33

Objective of the Course:

- To provide knowledge of different Smart System applications.
- To familiarize students with Arduino as IDE, programming language & platform.
- To provide knowledge of Arduino boards and basic components.
- Develop skills to design and implement various smart system applications.

Summary of the course:

Arduino Integrated Development Environment (IDE) is an open source IDE that allows users to write code and upload it to any Arduino board. Arduino IDE is written in Java and is compatible with Windows, macOS and Linux operating systems.

Course Outcomes:

- Upon successful completion of this course, students should be able to:
- Familiar with Arduino environment and its applications.
- Able to understand Arduino programming with C++.
- Able to Design Smart systems applications.
- Learn and understand about any new IDE, compiler, and MCU chip in Arduino
- Compatible boards or similar types.



PRINCIPAL **AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING AVADI - IAF, MUTHAPUDUPE** CHENNAI 600 055

Place: Chennai Date:29 /08/2022

From,

Head of the Department
Department of ECE
Aalim Muhammed Salegh College of Engineering
Avadi IAF, Muthapudupet
Chennai - 600055

To,

The Principal
Aalim Muhammed Salegh College of Engineering
Avadi IAF, Muthapudupet
Chennai - 600055

Respected Sir,

Sub: Requisition for the approval to conduct Value Added course in our ECE department – Reg.

We wish to conduct Value Added course in our ECE department on the topic "ARDUINO" a Guest Lecture Series From 05/09/2022 to 20/09/2022.

Resource Person:

S.BALAMURUGAN
STANFORD INDIA BIODESIGN
FELLOW SCHOOL OF INTERNATIONAL BIODESIGN
AIIMS NEW DELHI

CHENNA! BOO 055

The objective of conducting this Value Added course will give the industry focus in developing skills required by using latest technology advancement in "ARDUINO". This effort will benefit our Student's community and bring core strength in engineering field.

Thank you,

Organs

A Charles

Professor Dr. A. S. SAĽMABANU Head of the Department/ECE

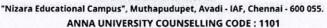
Yours truly

PRINCIPAL

AALMI MUHAMWED SALEGH
COLLEGE OF ENGINEERING



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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING CERTIFICATE COURSE-ARDUINO

Academic Year: (2022-2023)

COURSE CONTENT:

MODULE NO.	CONTENT	DURATION(Hrs)
MODULE 1	Introduction to Embedded Systems	6
	Anatomy of Embedded Systems	
	 Introduction to Open Source platform 	
	 Introduction of Electronic Components 	
	Introduction to Sensors	
	Introduction to Computational Devices	
MODULE 2	Introduction of Electronic Components	7
	What is Electronic Component?	
	History of Electronic Component	
	Various Electronic Component	13
	How to use Electronic Component	
MODULE 3	Introduction to Sensors	6
	 Components 	
	 Application of What is Sensor? 	
	 Various Basic Industrial Sensors-IR- Analog Sensor A IR Digital Sensor 	
	Color IR _TSOP Sensor FGH CO	
	 Color IR _TSOP Sensor Light Sensor 	
	Sound Sensor CHENNAL	
	DTMF Module DTMF Module	W
	• Selection of Sensor	STOLNICIDAL
	Basic working Technique of Sensor	AALIM MUHAMMED SALE
	Application of Sensor	COLLEGE OF ENGINEERS
	How to Interface Sensor	

	How to Design Analog/Digital Sensors		
MODULE 4	Introduction to Computational Devices	9	
	What is Computational Device?		
	 Transistor 		
	Logic Gates		
	Microprocessor		
	Microcontroller		
	 Difference B/W Various Computational Devices 		
	Application of various Computational Devices		
	Selection of Computational Device		
MODULE 5	How to work on Educational & Engineering Level Actuator	2	
	DC Motor		
	DC Geared Motor		
	Stepper Motor		
	Servo Motor		

TOTAL=30 HRS



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ANNA UNIVERSITY COUNSELLING CODE: 1101

Value Added Course Tentative Time Table And Schedule

Value Added Course Name: ARDUNIO Date of Commencement: From 05/09/2022 Timing: Week Days: 4:00 pm to 6:00 pm

Saturday's: 4.00 pm to 7.00 pm Tentative Date of Exam- 20/09/2022

Tentative Course Schedule - 05/09/2022 to 20/09/2022 (As per following)

No. Of Days: 14 Days Course Hours: 30

Speaker: Mr. S.BALA MURUGAN

- Module -1: Introduction to Embedded Systems

 05-09-2022 to 07-09-2022 2

 Hours Per Day (3 days) (6 Hrs)
- 2. Module -2: Introduction of Electronic Components— 08-09-2022 to 12-09-2022 2 Hours Per Day and 3 hours on Saturday (3 days) (7 Hrs)
- 3. Module -3: Introduction to Sensors 13-09-2022 to 15-09-2022 2 Hours Per day (3 days) (6 Hrs)
- 4. Module -4:Introduction to Computational Devices 16-09-2022 to 19-09-2022 2 Hours Per Day and 3 hours on Saturday (4 days) (9 Hrs)
- 5. Module -5:How to Work On Educational & Engineering Level Actuator 20-09-2022– (1 Days) (2 Hrs)

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AALIM MUHAMMED SALEGH
COLLEGE OF ENGINEERING

AVADI - IAF, MUTHAPUDUPET
CHENNAI 600 055

Department of Electronics and Communication Engineering Value Added Course:Arduino (2022-2023)
Year/Semester:IV/VII

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AALIM MUHAMMED SALE
COLLEGE OF ENGINEERING



MAKEN FALL



C-ID-2210602

CERTIFICATE OF PARTICIPATION This certificate is proudly presented to

AFFAN NABEEL A

20/09/2022. We appreciate your hard work & Sincerity towards your course and wish you good has successfully completed 5 days of valued Added Course in "ARDUINO" from 05/09/2022 to luck for your future endeavor.

alamurugan

Dinesh Agarna

DINESN AGARVAL CEO, INDIAMART

> BALAMURUGAN S TRAINER

COLLEGE OF ENGINEERING AALIM MUHAMMED SALEGH

C-ID-2210603



CERTIFICATE OF PARTICIPATION

This certificate is proudly presented to

AMEENA S

20/09/2022. We appreciate your hard work & Sincerity towards your course and wish you good has successfully completed 5 days of valued Added Course in "ARDUINO" from 05/09/2022 to

luck for your future endeavor.

BALAMURUGAN S TRAINER

Binesh Agan

DINESN AGARVAL
CEO, INDIAMART

AALIN MUHAMMED SALEGH COLLEGE OF ENGINEERING

C-ID-2210604

CERTIFICATE OF PARTICIPATION

This certificate is proudly presented to

ARUN KUMAR B

20/09/2022. We appreciate your hard work & Sincerity towards your course and wish you good has successfully completed 5 days of valued Added Course in "ARDUINO" from 05/09/2022 to luck for your future endeavor.

alamurugan

BALAMURUGAN S TRAINER



DINESN AGARVAL

CEO, INDIAMART

AALIM MUHAMMED SALEGH COLLEGE OF ENGINEER