RAJARAJESWARI COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi, Govt. of Karnataka, Affiliated to
Visvesvaraya Technological University, Belagavi)

#14, Ramohalli Cross, Kumbalagudu, Mysuru Road, Bengaluru-560074.

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NBA
CSE, ECE, ISE

A+
NAAC

Department of Electrical and Electronics Engineering

VALUE ADDED COURSE/SKILL TRAINING

on

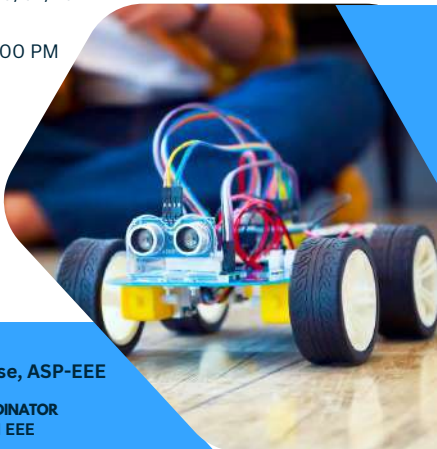# BASICS OF ROBOTICS

DATE
16/01/2024 to 20/01/2024

TIME
09:00 AM - 04:00 PM

VENUE
EEE Lab

REGISTER NOW

TRAINER
Dr.R.Arul Jose, ASP-EEE

STUDENT COORDINATOR
Mr.B.Pavan, III EEE

Dr.P.Ebby Darney
HOD-EEE

Dr.R.Balakrishna
PRINCIPAL

Date:09/01/2024

CIRCULAR

We are excited to announce a valuable opportunity for all interested individuals to enhance their skills in the field of robotics. To secure your spot in this course, please register by 12/01/24. Limited seats are available, so don't miss out on this opportunity to expand your knowledge and skills in the exciting field of robotics. We look forward to your active participation in this enriching event.

Event Name   : Value added course/Skill training on "Basics of Robotics"

Date   : 16th to 20th January 2024

Venue & Time   : EEE Lab / 09:00am to 04:00pm

Trainer   : Dr.R.Arul Jose

Associate Professor

Department of EEE

RajaRajeswari College of Engineering.

Registration Link: https://forms.gle/rgb6ew87L1xiQ1LBA

Event Coordinator
Dr.R.Arul Jose

HoD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

Department of Electrical and Electronics Engineering

Date:09/01/2024

SCHEDULE

Event Name : Value added course/Skill training on "Basics of Robotics"

Date : 16th to 20th January 2024

Venue & Time : EEE Lab / 09:00am to 04:00pm

Trainer : Dr.R.Arul Jose
Associate Professor
Department of EEE
RajaRajeswari College of Engineering.

Day	Topics Covered
Day 1	Introduction to Robotics-Arduino Programming-Simulation using Tinkercad.
Day 2	Installation of Arduino Ide-Realtime Implementation of Arduino- buzzer- Ultrasonic sensor-IR sensor-PIR sensor
Day 3	Bluetooth Module HC-05- Motor Driver L298N- Developing Bluetooth controlled Robot using Arduino UNO
Day 4	Developing line follower Robot using Arduino UNO
Day 5	Robo race-Introduction to various robot- valedictory function

Event Coordinator
Dr.R.Arul Jose

HoD

Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

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Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

Department of Electrical and Electronics Engineering

Date:16/01/2024

Registration

Event Name	: Value added course/Skill training on "Basics of Robotics"
Date	: 16th to 20th January 2024

Venue & Time : EEE Lab 3:00pm to 5:00pm

Trainer : Dr.R.Arul Jose
Associate Professor
Department of EEE
RajaRajeswari College of Engineering.

S.No	Name	USN Number	Year/Sem	Department	Email
1.	Tejaswini C	1RR23F629	I Year/I Sem	EEE	tejaswinic539@gmail.com
2.	CHANDANA. N	1RR23F692	I Year/I Sem	EEE	chandananswamy2004@gmail.com
3.	SUBHASH G	1RR22EE033	II Year/III Sem	EEE	subhash24g2004@gmail.com
4.	NITHIN A	1RR22EE019	II Year/III Sem	EEE	nithin.a900@gmail.com
5.	Gandikota Vishnu Datta	1RR22EE013	II Year/III Sem	EEE	vishnudatta35@gmail.com
6.	DEEKSHITHA REDDY S	1RR22EE010	II Year/III Sem	EEE	deekshithashivareddy@gmail.com
7.	H K VIJAY KUMAR	1RR22EE038	II Year/III Sem	EEE	kantarajuk707@gmail.com
8.	PRAJWAL RJ	1RR22EE021	II Year/III Sem	EEE	jawaliraja@gmail.com
9.	HAJILAL SAB	DIPLOMA	II Year/III Sem	EEE	hajipadeknoor@gmail.com
10.	MALLIKARJUNA KM	1RR23DD37	II Year/III Sem	EEE	colorful3123@gmail.com
11.	CHIDANANDASWAMI	1RR22EE008	II Year/III Sem	EEE	chidanandaswami04cr@gmail.com
12.	PAVAN KUMAR R L	1RR22EE020	II Year/III Sem	EEE	rlpavan1086@gmail.com
13.	BM DARSHAN	Diplomo lateral entry	II Year/III Sem	EEE	darshanbanakar306@gmail.com
14.	PRAJWAL L	1RR22EE022	II Year/III Sem	EEE	lokeshmurthyslokesh347@gmail.com
15.	GURUKIRAN AL	Diploma	II Year/III Sem	EEE	gurukiranaldasar@gmail.com
16.	PREMKUMAR M	Diploma	II Year/III Sem	EEE	premkumarm8151855@gmail.com
17.	LIKITH A	1RR22EE016	II Year/III Sem	EEE	alikith294@gmail.com
18.	H K VIJAY KUMAR	1RR22EE038	II Year/III Sem	EEE	kantarajuk707@gmail.com
19.	ASHER SUMITH	1RR22EE006	II Year/III Sem	EEE	ashersumith777@gmail.com
20.	JEEVAN P	1RR22EE014	II Year/III Sem	EEE	jeevanjeevu22160@gmail.com
21.	LITHISH M R	1RR22EE017	II Year/III Sem	EEE	lithishmr14@gmail.com
22.	Bharath N J	Lateral	II Year/III Sem	EEE	bbharathnj@gmail.com
23.	Aishwarya S	1RR21EE002	III Year/V Sem	EEE	aishwaryasaravanan1810@gmail.com
24.	JOEL SIBI	1RR22EE407	III Year/V Sem	EEE	lifeofjoel357@gmail.com
25.	SAI VIVEK Y	1RR22EE414	III Year/V Sem	EEE	saivivek6y@gmail.com

Event Coordinator
Dr.R.Arul Jose

HoD-EEE

RajaRajeswari College of Engineering

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Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

Department of Electrical and Electronics Engineering

5 Day workshop on **Basics of Robotics**

Attendance Sheet

S.No	Name	USN Number	Dept	Day 1 16/01/24	Day 2 17/01/24	Day 3 18/01/24	Day 4 19/01/24	Day 5 20/01/24
1.	Asher Sumith	IRR22EE006	EEE	Ashes	Ashes	Ashes	Ashes	Ashes
2.	Likith. A	IRR22EE016	EEE	Likth	Likll	Likith.A	Likiths	LikithA
3	Nithin .A	IRR22EE019	EEE	Nith	Nith	Nithin	Nithin	Nithin
4.	Jeevan.P	IRR22EE014	EEE	Jeevanp	Jeevanp	Jeevanp	Jeevanp	Jeun
5.	Prem Kumar .M	Diplomo	EEE	M.Prem	M.Prem	M.Prem	M.Prem	
6.	BM.DARSHAN	— II —	EEE					
7.	Chidanandasnami	IRR22EE008	EEE					
8.	SUBHASH-G	IRR22EE033	EEE	feel	feel	feel	feel	a
9.	Bharath N.J	Diploma	EEE	Bhu	Bhu	Bhu	Bhu	Bhu
10.	HiK.Vijay Kumar	14R22EE038	EEE	H.K.Vijay ku	H.K.Vijay kum	H.K.Vijay Kumar	H.K.Vijay	H.K.Vijay kum
11.	Yuru Kiran A.L	— II —	EEE	Gurukiran	Gurukiran	Gurukiran	Gurukiran	
12.	Tejaswini .C.	IRR23F629	EEE		Tejawini.C	Tejaswini	Tejaswini	
13.	Chandana.N.	IRD23F692	EEE		Chandana.N	Chandana.N	Chandana.N	Chandana.N
14.	Yishnu Datta	IRR22EE013	EEE	Yishnu	Yishnu	Yishnu	Yishnu	Yishnu
15.	Haji Lal sab	Diploma	EEE					
16.	PRAJWAL.B.J	IRR22EE021	EEE	Prjau	PR		Prjawal	PR
17.	PavanKKmar.R.L	IRR22EE020	EEE	Pavan	Pavan	Pavan	Pavan	
18.	LITHISH M.R	IRR22EE017	EEE	Lth	Lth	Lth	Lth	
19.	Thambaa Selua.S	Diploma	EEE	T	T	T	T	
20.	Deekshitha Reddy.S	IRR22EE010	EEE	D.Reddy	D.Reddy	D.Reddy	D.Reddy	D.Reddy.S
21.	Mallikarjun KM	DiP	EEE	KM	KM	KM	KM	
22.	SAI VIVEK.Y	IRR 22EE414	EEE	Sailn	Sailn	Sailn	Sailn	Sri Vivek
23.	Aishwarya.S	IRR21EE002	EEE	Aish	Aish	Aish	Aish	Aish
24.	JOEL SIBI	IRR22EE407	EEE					
25.	Prajwal.L	IRR22EE022	EEE					

Coordinator

HoD/EEE

Date:22/01/2024

Report

Event Name	: Value added course/Skill training on "Basics of Robotics"
Date	: 16th to 20th January 2024
Venue & Time	: EEE Lab 09:00am to 04:00pm
Trainer	: Dr.R.Arul Jose
	Associate Professor
	Department of EEE
	RajaRajeswari College of Engineering.

### Day 1: Introduction to Robotics-Arduino Programming-Simulation using Tinkercad

The workshop commenced with encouraging speech by Dr.P.Ebby Darney, HoD of EEE Department. The course started an engaging introduction to the fascinating world of robotics and Arduino programming by the Trainer. Participants gained insights into the principles of robotics and the basics of programming using the versatile Arduino platform. The day concluded with hands-on simulation exercises using Tinkercad, allowing attendees to visualize and experiment with their newly acquired knowledge.

Day 2: Installation of Arduino Ide-Realtime Implementation of Arduino-Buzzer- Ultrasonic Sensor-IR Sensor-PIR Sensor

Participants delved into practical aspects on Day 2, starting with the installation of Arduino IDE. Real-time implementation of Arduino involved working with essential components such as buzzers, ultrasonic sensors, IR

sensors, and PIR sensors. This session provided a solid foundation for participants to understand the functioning of these components and their integration with Arduino.
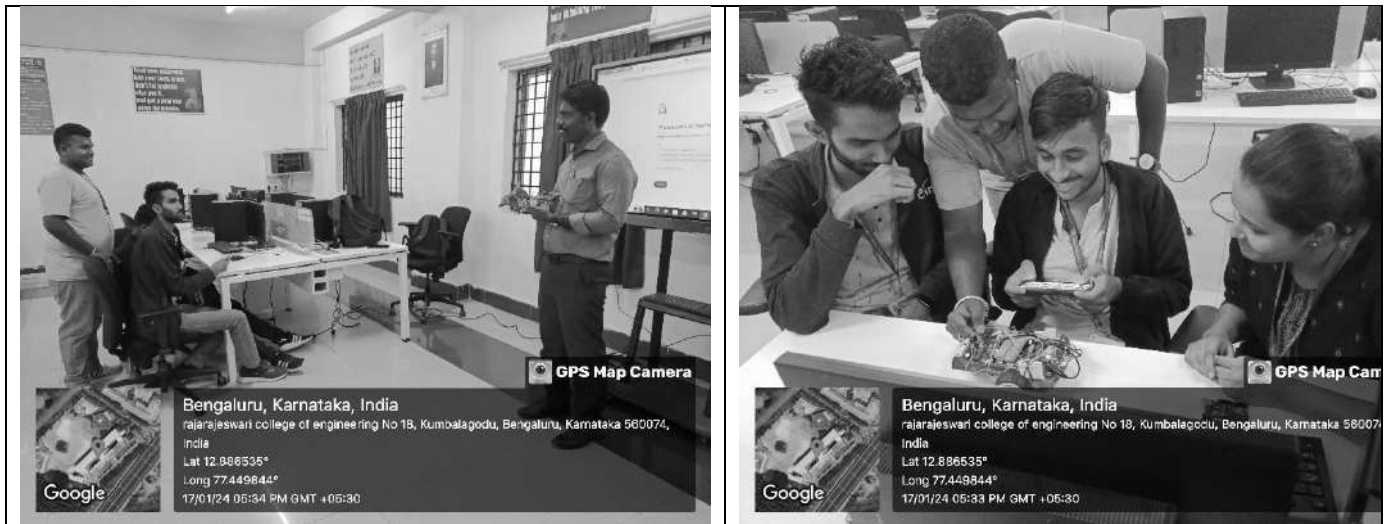
Day 3: Bluetooth Module HC-05- Motor Driver L298N- Developing Bluetooth Controlled Robot using Arduino UNO

Day 3 focused on advanced topics, introducing Bluetooth technology with the HC-05 module and Motor Driver L298N. Participants actively engaged in developing a Bluetooth-controlled robot using Arduino UNO. This hands-on session enhanced their skills in wireless communication and motor control, marking a significant step towards practical applications in robotics.
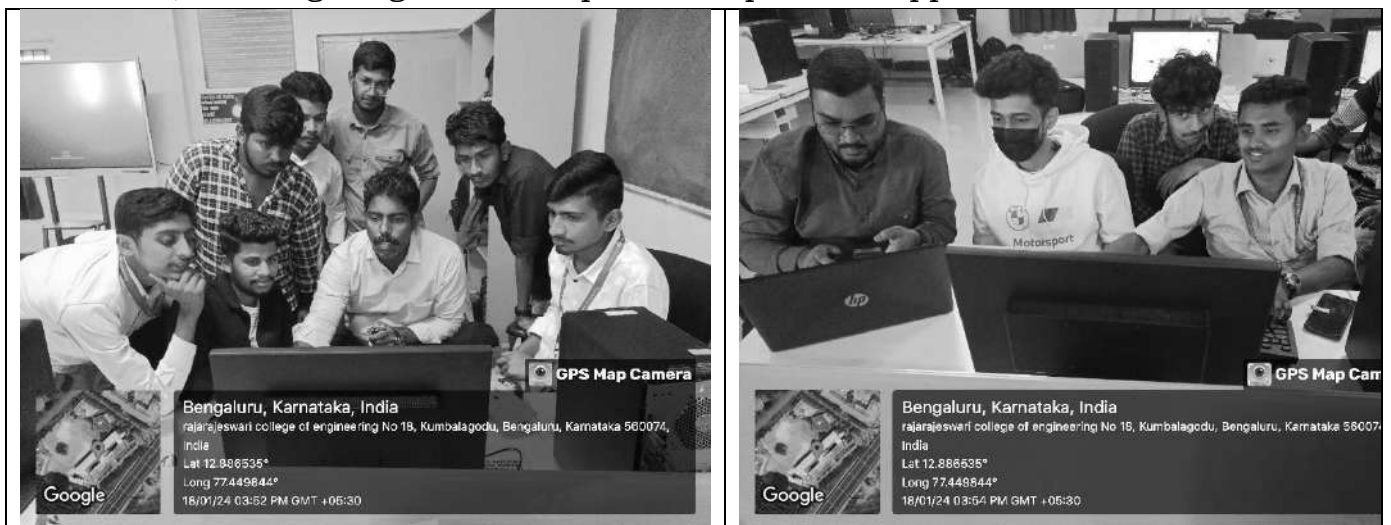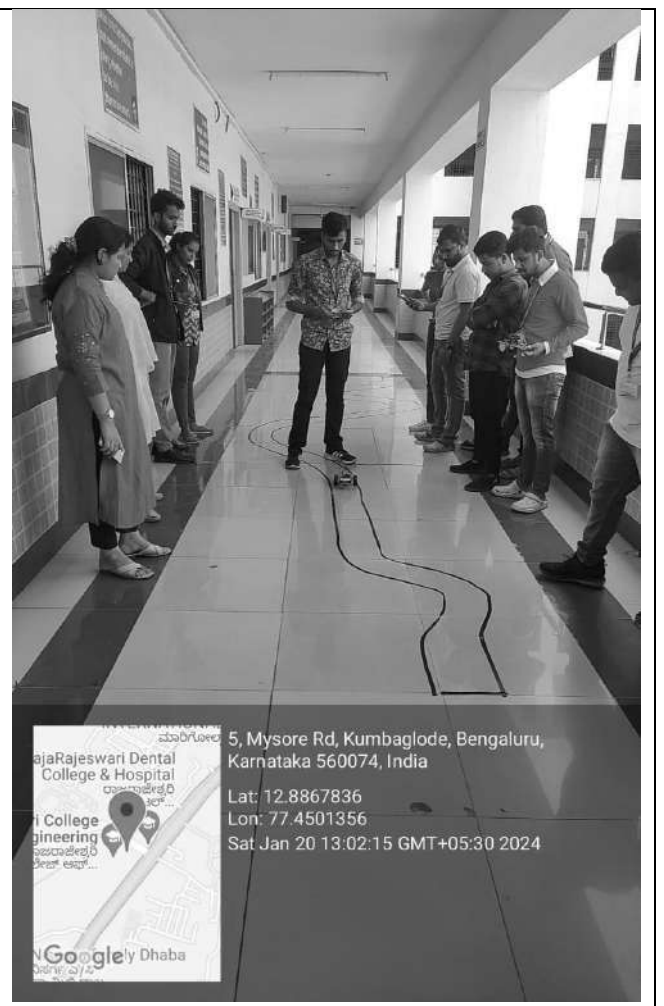

Day 4: Developing Line Follower Robot using Arduino UNO

The fourth day centered around the development of a line follower robot, showcasing the integration of sensors and programming logic. Participants learned how to implement algorithms that enable a robot to follow a predefined path. This session emphasized the importance of precision in programming and sensor calibration for successful robotics projects.

Day 5: Robo Race-Introduction to Various Robots-Valedictory Function

The concluding day featured a thrilling Robo Race, where participants demonstrated the practical application of their acquired skills in a competitive environment. The workshop concluded with an introduction to various types of robots, providing a comprehensive overview of the diverse applications in the field of robotics. The valedictory function was headed by Dr.J. Amutharaj, Vice Principal and Dr.P.Ebby Darney, HoD-EEE department. The valedictory ceremony celebrated the achievements of the participants and acknowledged their dedication throughout the workshop.

Bengaluru, Karnataka, India
rajarajeswari college of engineering No 18, Kumbalagodu, Bengaluru, Karnataka 560074, India
Lat 12.886535°
Long 77.449844°
20/01/24 12:06 PM GMT +05:30

Bengaluru, Karnataka, India
rajarajeswari college of engineering No 18, Kumbalagodu, Bengaluru, Karnataka 560074, India
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20/01/24 01:11 PM GMT +05:30

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Lat 12.886535°
Long 77.449844°
20/01/24 01:25 PM GMT +05:30

The 5 day workshop on Basics of Robotics at RajaRajeswari College of Engineering provided participants with a holistic understanding of robotics principles and hands-on experience in Arduino programming. The combination of theoretical sessions, practical implementations, and a competitive Robo Race ensured that participants left with a well-rounded skill set. The workshop not only enriched the knowledge of the participants but also fostered a sense of enthusiasm and curiosity for the dynamic field of robotics. The success of this workshop is a testament to the commitment of the EEE department at RajaRajeswari College of Engineering in providing quality hands-on training opportunities to its students.

Event Coordinator
Dr.R.Arul Jose

HoD

Principal

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Department of Electrical and Electronics Engineering

Certificate of Appreciation

This is to certify that Mr/Ms. NIKITHA

of 2ⁿᵈ year B.E. EEE has attended on-hand skill training workshop on Basics of
Robotics for 5 Days from 16.01.2024 to 20.01.2024 at RajaRajeswari College of
Engineering, Bengaluru.

Dr.R.Arul Jose
Coordinator

Dr.P.Ebby Darney
HoD-EEE

Dr.R.Balakrishna
Principal

CSE, ECE, ISE
NATIONAL BOARD OF ACCREDITATION

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ACCREDITED WITH GRADE

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Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

Department of Electrical and Electronics Engineering

Certificate of Appreciation

This is to certify that Mr/Ms PRVAN KUMAR R.L

of 2nd year B.E. EEE has attended on-hand skill training workshop on Basics of
Robotics for 5 Days from 16.01.2024 to 20.01.2024 at RajaRajeswari College of
Engineering, Bengaluru.

Dr.R.Arul Jose
Coordinator

Dr.P.Ebby Darney
HoD-EEE

Dr.R.Balakrishna
Principal

RAJARAJESWARI COLLEGE OF ENGINEERING

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GSE, EGE, ISE

A+

NAAC

Department of Electrical and Electronics Engineering

VALUE ADDED COURSE/SKILL TRAINING

on

INTRODUCTION TO DRONE TECHNOLOGY & HUMANOID ROBOTICS

DATE
15/07/2024 to 19/07/2024

TIME
09:00 AM - 04:00 PM

VENUE
EEE Lab

TRAINER

Mr. Keerthik Kumar S
CEO & Founder of Technovation
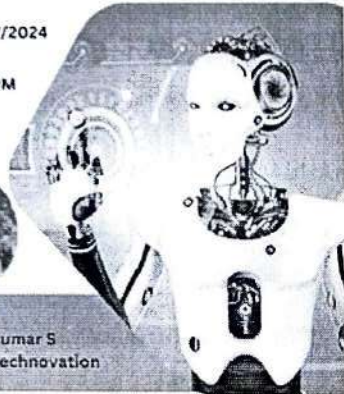
Prof. Shivalingaiah K.L
COORDINATOR

Dr.P.Ebby Darney
HOD-EEE

Dr.R.Balakrishna
PRINCIPAL

Department of Electrical and Electronics Engineering

Date:08/07/2024

CIRCULAR

We are pleased to announce a Hands-on Skill Training on Introduction to Drone Technology & Humanoid Robotics, organized by the Department of Electrical & Electronics Engineering. The event is scheduled as follows:

Event Name : Value added course/Skill training on "Introduction to Drone Technology & Humanoid Robotics"

Date : 15th to 19th July 2024

Venue & Time : Tesla Hall, EEE Dept / 09:00am to 04:00pm

Trainer : Mr. Keerthik Kumar S,
CEO & Founder
Technovation, Tirunelveli, Tamilnadu

The training session aims to provide second and third-year students with practical knowledge and skills in the fields of drone technology and humanoid robotics. The session will cover:

Guest Lecture: Insights on the latest trends and applications in drone technology and humanoid robots.

Hands-on Training: Assembling drone components, programming drones, and understanding humanoid robot mechanics.

Interactive Session: Q&A with the guest speaker and technical experts.

Event Coordinator

HoD

Professor
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

RajaRajeswari College of Engineering

(Approved by AICTE, New Delhi, Govt. of Karnataka, Affiliated to Visvesvaraya Technological University, Belagavi)

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

Department of Electrical and Electronics Engineering

Date:08/07/2024

SCHEDULE

Event Name : Value added course/Skill training on "Introduction to Drone Technology & Humanoid Robotics"

Date : 15th to 19th July 2024

Venue & Time : Tesla Hall, EEE Dept / 09:00am to 04:00pm

Trainer : Mr. Keerthik Kumar S,
CEO & Founder
Technovation, Tirunelveli, Tamilnadu

Day	Topics	Session 1 9.00 am to 10.30 am	Session 2 10.45 am to 12.45 pm	Session 3 2.00 pm to 4.00 pm
Day 1 15.07.24	Introduction to Drone Technology	Overview of Drones	Drone Components and Technology	Hands-on Assembly and Calibration
Day 2 16.07.24	Drone Flight and Control Systems	Principles of Flight	Introduction to Drone Piloting	Hands-on Drone Piloting
Day 3 17.07.24	Introduction to Humanoid Robotics	Basics of Robotics	Humanoid Robot Design	Hands-on Robot Assembly
Day 4 18.07.24	Humanoid Robotics Programming and Control	Introduction to Humanoid Robot Programming	Advanced Robot Movements	Hands-on Programming Session
Day 5 19.07.24	Applications and Future Trends	Drones in Advanced Applications	Future of Humanoid Robotics	Final Project and Demo

Event Coordinator

HoD
Professor & HOD
Dept. of Electrical & Electronics Engg
Rajarajeswari College Of Engineering
Bengaluru-74

Campus: #14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bengaluru – 560074
Phone:+91-80-28437124 / 28437375
Website: https://www.rrce.org

RajaRajeswari College of Engineering

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Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

Department of Electrical and Electronics Engineering

Date:12/07/2024

Registration

Event Name : Value added course/Skill training on "Introduction to Drone Technology & Humanoid Robotics"

Date : 15th to 19th July 2024

Venue & Time : Tesla Hall, EEE Dept / 09:00am to 04:00pm

Trainer : Mr. Keerthik Kumar S, CEO & Founder Technovation, Tirunelveli, Tamilnadu

S.No	Name	USN Number	Year/Sem	Department
1.	AFNAN SHARIFF A	1RR21EE001	III/VI	EEE
2.	AISHWARYA S	1RR21EE002	III/VI	EEE
3.	B PAVAN	1RR21EE003	III/VI	EEE
4.	BHUMIKA K RAMESH	1RR21EE004	III/VI	EEE
5.	JYOTHSNA RAM. P	1RR21EE005	III/VI	EEE
6.	KEERTHANA G C	1RR21EE006	III/VI	EEE
7.	MANOJ KP	1RR21EE007	III/VI	EEE
8.	MARUTHI . T	1RR21EE008	III/VI	EEE
9.	MOHAMMED KAIF	1RR21EE009	III/VI	EEE
10.	POOJA H PATEL	1RR21EE010	III/VI	EEE
11.	PUNITH N	1RR21EE011	III/VI	EEE
12.	VINU DHARANI K L	1RR21EE012	III/VI	EEE
13.	VISHAL G	1RR21EE013	III/VI	EEE
14.	VIVEK N	1RR21EE014	III/VI	EEE
15.	YESHWANTH NAIDU. M	1RR21EE015	III/VI	EEE
16.	BHARATH K GOWDA	1RR22EE400	III/VI	EEE
17.	BHARATH N	1RR22EE401	III/VI	EEE
18.	CHANDAN S P	1RR22EE402	III/VI	EEE
19.	GIRISH PRABHAKAR BHANDARI	1RR22EE404	III/VI	EEE
20.	HARSHITHA C	1RR22EE405	III/VI	EEE
21.	HIRE KURUBAR ANILKUMAR	1RR22EE406	III/VI	EEE
22.	JOEL SIBI	1RR22EE407	III/VI	EEE
23.	JYOTI	1RR22EE408	III/VI	EEE
24.	KEERTHANA B	1RR22EE409	III/VI	EEE
25.	MATHEW PAUL J	1RR22EE410	III/VI	EEE
26.	PRAJWALA M P	1RR22EE411	III/VI	EEE
27.	PRAKRUTHI S	1RR22EE412	III/VI	EEE
28.	RAKSHITHA SY	1RR22EE413	III/VI	EEE
29.	SAI VIVEK Y	1RR22EE414	III/VI	EEE
30.	SHRUTHI GS	1RR22EE415	III/VI	EEE
31.	YASHVANTH SIDDU AS	1RR22EE417	III/VI	EEE

Event Coordinator

Dr.R.Arul Jose

HoD-EEE
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

RajaRajeswari College of Engineering

Department of Electrical and Electronics Engineering

Attendance Sheet

Event Name : Value added course/Skill training on "Introduction to Drone Technology & Humanoid Robotics"

Date : 15th to 19th July 2024

Venue & Time : Tesla Hall, EEE Dept / 09:00am to 04:00pm

Trainer : Er. Keerthik Kumar S & Er. G. Vedha Jeyaram

Technovation, Tirunelveli, Tamilnadu

S.No	Name	USN Number	Day 1 15/07/24	Day 2 15/07/24	Day 3 15/07/24	Day 4 15/07/24	Day 5 15/07/24
1.	AFNAN SHARIFF A	1RR21EE001					
2.	AISHWARYA S	1RR21EE002					
3.	B PAVAN	1RR21EE003					
4.	BHUMIKA K RAMESH	1RR21EE004					
5.	JYOTHSNA RAM. P	1RR21EE005					
6.	KEERTHANA G C	1RR21EE006					
7.	MANOJ KP	1RR21EE007					
8.	MARUTHI . T	1RR21EE008					
9.	MOHAMMED KAIF	1RR21EE009					
10.	POOJA H PATEL	1RR21EE010	AB	AB	AB	AB	AB
11.	PUNITH N	1RR21EE011					
12.	VINU DHARANI K L	1RR21EE012					
13.	VISHAL G	1RR21EE013					
14.	VIVEK N	1RR21EE014					

15.	YESHWANTH NAIDU. M	1RR21EE015					
16.	BHARATH K GOWDA	1RR22EE400					
17.	BHARATH N	1RR22EE401					
18.	CHANDAN S P	1RR22EE402					
19.	GIRISH PRABHAKAR BHANDARI	1RR22EE404					
20.	HARSHITHA C	1RR22EE405					
21.	HIRE KURUBAR ANILKUMAR	1RR22EE406					
22.	JOEL SIBI	1RR22EE407					
23.	JYOTI	1RR22EE408					
24.	KEERTHANA B	1RR22EE409					
25.	MATHEW PAUL J	1RR22EE410					
26.	PRAJWALA M P	1RR22EE411					
27.	PRAKRUTHI S	1RR22EE412					
28.	RAKSHITHA SY	1RR22EE413					
29.	SAI VIVEK Y	1RR22EE414					
30.	SHRUTHI GS	1RR22EE415					
31.	YASHVANTH SIDDU AS	1RR22EE417					

Event Coordinator

HoD EEE

RajaRajeswari College of Engineering

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Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

A+
NAAC

Department of Electrical & Electronics Engineering

Event Report: Hands-on Skill Training on Introduction to Drone Technology & Humanoid Robotics

Organized by: Department of Electrical & Electronics Engineering, RajaRajeswari College of Engineering, Bengaluru

Date	: 15th to 19th July 2024
Venue & Time	: Tesla Hall, EEE Dept / 09:00am to 04:00pm
Trainer	: Mr. Keerthik Kumar S, CEO & Founder Technovation, Tirunelveli, Tamilnadu
	Er. G. Vedha Jeyaram, Chief Technical Officer Technovation, Tirunelveli, Tamilnadu

Program Coordinators: Dr. R. Arul Jose, Associate Professor

Prof. Shivalingaiah K L, Assistant Professor

Event Overview:

The Department of Electrical and Electronics Engineering at RajaRajeswari College of Engineering organized a five-day value-added course on **Introduction to Drone Technology & Humanoid Robotics** from July 15 to July 19, 2024. The workshop provided students and participants with hands-on experience and in-depth knowledge about cutting-edge technologies in the domains of drone technology and humanoid robotics.

Objectives:

- To introduce participants to the fundamentals of drone technology and humanoid robotics.
- To provide practical training on the assembly and operation of drones.
- To explore the design, control, and programming of humanoid robots.

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- To equip participants with the skills needed to work on real-world applications in these emerging fields.

Schedule of event

Day	Topics	Session 1 9.00 am to 10.30 am	Session 2 10.45 am to 12.45 pm	Session 3 2.00 pm to 4.00 pm
Day 1 15.07.24	Introduction to Drone Technology	Overview of Drones	Drone Components and Technology	Hands-on Assembly and Calibration
Day 2 16.07.24	Drone Flight and Control Systems	Principles of Flight	Introduction to Drone Piloting	Hands-on Drone Piloting
Day 3 17.07.24	Introduction to Humanoid Robotics	Basics of Robotics	Humanoid Robot Design	Hands-on Robot Assembly
Day 4 18.07.24	Humanoid Robotics Programming and Control	Introduction to Humanoid Robot Programming	Advanced Robot Movements	Hands-on Programming Session
Day 5 19.07.24	Applications and Future Trends	Drones in Advanced Applications	Future of Humanoid Robotics	Final Project and Demo

Day-wise Summary

Day 1: July 15, 2024

The workshop commenced with an **Introduction to Drone Technology**, where participants learned about the history, types, and applications of drones. This was followed by an overview of drone components, including motors, sensors, flight controllers, and communication systems. The session concluded with hands-on training on drone assembly.

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Day 2: July 16, 2024

Participants were introduced to the Principles of Flight and aerodynamics in drone technology. They gained insights into drone control systems and practiced flying drones in a controlled environment, working on basic maneuvers like hovering, takeoff, and landing.

Day 3: July 17, 2024

The focus shifted to Humanoid Robotics, where participants were introduced to the components and sensors used in humanoid robots. A detailed explanation of the kinematics of humanoid movement was followed by a practical session on assembling basic humanoid structures.

Day 4: July 18, 2024

The session explored the Programming and Control of Humanoid Robots. Participants were taught programming techniques and control algorithms using robotics software and hardware. They also practiced programming humanoid robots to perform basic movements and tasks.

Day 5: July 19, 2024

On the final day, advanced concepts in Drone and Robotics Applications were discussed. Participants explored the future of drone technology in fields like delivery systems and autonomous drones, as well as the role of AI in humanoid robotics. The session ended with a Project Presentation, where participants showcased their projects involving drone flight and humanoid control.

The valedictory function began with a welcome address by Mr. Vishal G, a pre-final year student. This was followed by the Presidential Address delivered by Dr. J. Amutharaj, Vice Principal. The Felicitation was provided by Dr. P. Ebby Darney, Head of the Department of Electrical and Electronics Engineering, who delivered an inspiring speech, emphasizing the importance of staying updated with technological advancements and encouraging students to actively participate in such hands-on sessions. The event concluded with a vote of thanks by Dr. R. Arul Jose, Associate Professor, who expressed gratitude towards the guest speaker, participants, and the organizing team.

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Guest Lecture:

- Mr. Keerthik Kumar S, CEO & Founder of Technovation, was the chief guest and speaker for the event. He shared his insights on the latest trends in drone technology and the development of humanoid robots.
- His lecture covered various aspects including the design, development, and real-world applications of drones and humanoid robots.

Hands-on Training:

- The hands-on session was the main highlight of the event where students got the opportunity to work on real drone models and humanoid robots.
- The training included assembling drone components, programming the drones for specific tasks, and understanding the mechanics behind humanoid robots.
- Students were divided into small groups to ensure individual attention and effective learning.

Interactive Session:

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An interactive Q&A session was conducted where students posed their queries to Mr. Keerthik Kumar S. and Er. G. Vedha Jeyaram, Chief Technical Officer. This session provided valuable insights and clarified various doubts related to drone technology and robotics.

Conclusion:

The event concluded with a vote of thanks by Dr. R. Arul Jose, Associate Professor, who expressed gratitude towards the guest speaker, participants, and the organizing team. This event successfully provided students with a valuable learning experience and motivated them to explore further in the field of drone technology and humanoid robotics. The Department of Electrical & Electronics Engineering looks forward to organizing more such informative and engaging events in the future.

HoD-EEE or & HOD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

Principal

RAJARAJESWARI COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi, Govt. of Karnataka, Affiliated to
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#14, Ramohalli Cross, Kumbalagudu, Mysuru Road, Bengaluru-560074.

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Department of Electrical and Electronics Engineering

Certificate of Appreciation

This is to certify that Mr/Ms **B.Pavan**

of **III** year B.E. EEE has attended hands-on skill training on **Introduction to Drone Technology & Humanoid Robotics** for 5 Days from 15.07.2024 to 19.07.2024 at Rajarajeswari College of Engineering, Bengaluru.

Dr.P.Ebby Darney
HoD-EEE

Dr.R.Balakrishna
Principal

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Certificate of Appreciation

This is to certify that Mr/Ms **Sai Vivek .Y**

of **III** year B.E. EEE has attended hands-on skill training on **Introduction to Drone Technology & Humanoid Robotics** for 5 Days from 15.07.2024 to 19.07.2024 at Rajarajeswari College of Engineering, Bengaluru.

Dr.P.Ebby Darney
HoD-EEE

Dr.R.Balakrishna
Principal