



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited with Grade "A" by NAAC | 12B Status by UGC | Approved by AICTE



HANDS-ON WORKSHOP ON VIRTUAL ROBOTICS

Organized By:

DEPARTMENT OF MECHATRONICS ENGINEERING
SCHOOL OF MECHANICAL ENGINEERING

19th to 24th APRIL 2021

About Department of Mechatronics Engineering

Started in 2018 under the School of Mechanical Engineering, the Department of Mechatronics Engineering has emerged as a **launchpad** for the evolution of Mechanical and Electronics Engineering through the amalgamation of mechanics, precision engineering, sensor and actuation technology, computer science and control theory. The department offers a 4-year B.E. degree **program** with a modern curriculum matching to the needs of the industry. The department has futuristic infrastructure and well-equipped laboratories. The pivotal aim of the department is to provide outstanding education to the students with practical knowledge and hands on experience to solve the Industrial problems.

About Mukkudal Robotics

Mukkudal Robotics is a team of energetic engineers. They believe practical learning is the key resource to train the young minds to build their **future** tech world. They make students to get involved in STEAM Education through Robotics, which improves creativity, innovation and coding skills. Started year 2019, **Mukkudal** Robotics is constantly growing from strength to strength by focusing on quality education through technology.



Sessions Handled By



Mr. MIRANJAN S D R, Founder & CEO, **Mubkada Robotics**

An Electronics and Communication Engineer, with core interest in creative field chose Robotics has his career and started implementing his creativity in robotics since completing his education. He believes young minds are to be involved in tech based practical learning, which makes students to see their future in an optimistic view, so he started an **Edtech-Organization** with the team of equipped engineers.

WORKSHOP SCHEDULE

DAY - 1 (19.04.2021)	DAY - 2 (20.04.2021)	DAY - 3 (21.04.2021)
INTRODUCTION TO ROBOTICS EV3 ROBOTICS KIT	SOFTWARE OVERVIEW	CALIBRATION
PRACTICAL ROBOTICS KIT Vs VIRTUAL ROBOTICS KIT	ACTION BLOCK (Motor Control)	SQUARE FORMATION LOOPING
	PROJECT OF THE DAY	PROJECT OF THE DAY
DAY - 4 (22.04.2021)	DAY - 5 (23.04.2021)	DAY - 6 (24.04.2021)
PROJECT OF THE DAY	PROJECT OF THE DAY	SWITCHCASE
(Touch Sensor & Ultrasonic sensor)	(Colour Sensor & Gyro Sensors)	LINE FOLLOWER

CHIEF PATRONS

Dr. Mariasasa Johnson
Chancellor

Dr. Madia Johnson
President

**Ms. Madia Bernadette
Familaraul Johnson**
Vice President

PATRONS

Dr. T. Sathya
Vice Chancellor

Dr. S. Prakash
Dean, Mechanical

CONVENERS

Dr. M. Sangeetha
Asst. Prof., Mechatronics

Mr. J. R. Deepak
Asst. Professor, Mechatronics

COORDINATOR

Mr. Nivin Joy
Asst. Professor, School of Mechanical

Register before April 17th at:

bit.ly/RoboticsWorkshop2021



Pay the Workshop Registration Fees of Rs.300
through Google Pay to 988 484 3539



For More Details Contact:

Dr. M. Sangeetha (97 90 99 62 34)

Mr. J. R. Deepak (90 47 38 23 98)

Mr. Nivin Joy (98 84 84 35 39)

www.sathyabama.ac.in

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Using virtual Robotics Toolkit and LabVIEW EV3 Mindstorm the following project were done

1. Move forward 2000 degree/speed 50/ Break. Move backward 2.5 sec/ speed-100/coast
2. Move forward 4sec/ speed50/break move
Backward 6 rotations/speed100/coast move
Forward 1000 degree/speed50/ break
3. Make a square of 1000 degree using point turn and swing turn
4. Project on touch sensor and ultrasonic sensor, colour sensor, gyro sensor
5. Project on switch case and line follower

Attendance Summary for VIRTUAL ROBOTICS (Day wise)

Sl. No	Email Address	Name of the Participant	Session
1	yashwanthtekumudi1@gmail.com	37150192 Tekumudi Yashwanth	Day 1 (19.04.2021)
2	k.likithkumar2001@gmail.com	39860008 Likith Kumar	Day 1 (19.04.2021)
3	naveen.g0514@gmail.com	38090015 Naveen.G	Day 1 (19.04.2021)
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6	devhimayan@gmail.com	40090007 Devaragothaman.Y.A	Day 1 (19.04.2021)
7	pavanupasi123@gmail.com	19NE5A0323 Upasi.Sri Venkat Pavan	Day 1 (19.04.2021)
8	saisasikamani@gmail.com	40260020 Sai Sasika M	Day 1 (19.04.2021)
9	yuvatreyakapro@gmail.com	38150048 Katnam Yasaswi Utham Venkata Atreya	Day 1 (19.04.2021)
10	gudepusivasaireddy67@gmail.com	19NE5A0312 Siva Sai Reddy Gudepu	Day 1 (19.04.2021)
11	nagapatlanyb2002@gmail.com	39090029 N.Yaseer Basha	Day 1 (19.04.2021)
12	kevinrajadurai@gmail.com	40090015 E.Kevin Rajadurai	Day 1 (19.04.2021)
13	p.raviteja4134@gmail.com	37150133 Pachipulus V R N P Raviteja	Day 1 (19.04.2021)
14	siddarthaguraja@gmail.com	39090011 Guraja Siddhartha	Day 1 (19.04.2021)
15	kamalinee05s@gmail.com	38090010 Kamalinee S	Day 1 (19.04.2021)
16	kumarvishalm1998@gmail.com	BTECH19MEL01 Vishal Kumar	Day 1 (19.04.2021)
1	kamalinee05s@gmail.com	38090010 Kamalinee S	Day 2 (20.04.2021)
2	devhimayan@gmail.com	40090007 Devaragothaman.Y.A	Day 2 (20.04.2021)
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HANDS ON WORKSHOP

ON
VIRTUAL
ROBOTICS



Organized by
**Department of
Mechatronics Engineering**
in association with



Mukkudal Robotics

Unique Certificate ID: SB-MTR-RCBO-007



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Rajiv Gandhi Road, Opposite Nagar Cherali - 600 114, Chennai, India



Certificate

of Participation

This is to certify that S.RISWANTH of

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY has

actively participated in the 6 day Hands on Workshop on **Virtual Robotics** organized by the Department of Mechatronics Engineering, Sathyabama Institute of Science and Technology, Chennai in association with Mukkudal Robotics, from 19th to 24th April 2021


Mr. Nivin Joy
(Convener)


Dr. M. Sangeetha
(Convener)


Dr. S. Prakash
(Dean Mechanical)

AutoCAD Design Software Training for Automotive Engineering Post Graduate students and Mechatronics Engineering students Organized by Department of Mechatronics Engineering, Sathyabama Institute of Science and Technology and Wollo University – KIOT Ethiopia from 04.04.2021 to 25.04.2021 (Sunday). 16 Post Graduate Students of Wollo University and 24 II year Mechatronics Engineering students have successfully completed the short term course.

WOLLO UNIVERSITY KOMBOLCHA INSTITUTE OF TECHNOLOGY, ETHIOPIA	IN COLLABORATION WITH	SATHYABAMA INSTITUTE OF SCIENCE & TECHNOLOGY, INDIA
		
		
ONLINE FACULTY EXCHANGE PROGRAM		
“SHORT TERM SKILL DEVELOPMENT COURSE” ON “AUTOCAD DESIGN” TRAINING FOR AUTOMOTIVE ENGINEERING PART TIME POST GRADUATE STUDENTS		
ORGANIZED BY DEPARTMENT OF MECHANICAL ENGINEERING IN ASSOCIATION WITH ENGINEERING COLLEGE POST GRADUATE RESEARCH & CO-ORDINATE OFFICE, KIOT		
Dr. S. PRABHAKAR Associate Professor, Automobile Stream, Wollo University, Kombolcha Institute of Technology (KIOT), Ethiopia	FACILITATORS	Mr. J. R. DEEPAK Assistant Professor, School of Mechanical Engineering, Sathyabama Institute of Science and Technology, India

**WOLLO UNIVERSITY
KOMBOLCHA INSTITUTE OF
TECHNOLOGY, ETHIOPIA**



**IN
COLLABORATION
WITH**



**SATHYABAMA INSTITUTE OF
SCIENCE & TECHNOLOGY,
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ONLINE FACULTY EXCHANGE PROGRAM

**"SHORT TERM SKILL DEVELOPMENT COURSE" ON "AUTOCAD DESIGN" TRAINING FOR AUTOMOTIVE
ENGINEERING PART TIME POST GRADUATE STUDENTS**








SECOND YEAR

DAWIT ASRES ALEMU

AMANUEL SEIFU WASSIHUN

JEMAL SEID TADESSE

DARIK ATNAFU ABEGAZ

HELEN AMSALU BEYENE

ABDULAZIZ KASSAW YIMER








FIRST YEAR

ABDULKARIM BELAY HAMZA

MUADH SOLOMON

MELESE WORKU

MANAYE NEGUSSIE ASMARE

AHMED ALI

HUSSEIN AHMED ENDERIS






4/4/2021

ZOOM MEET

MULUKEN KASSAW BRHANE

CHILEN TATEK KEBEDE

ALI MOHAMMED YESUF

BILAL SEID MUZEYIN

**ORGANIZED BY DEPARTMENT OF MECHANICAL ENGINEERING
IN ASSOCIATION WITH ENGINEERING COLLEGE POST GRADUATE RESEARCH & CO-ORDINATE OFFICE, KIOT**

Mr. J. R. DEEPAK, Assistant Professor, School of Mechanical Engineering,
Sathyabama Institute of Science and Technology, India

FACILITATORS

Dr. S. PRABHAKAR, Associate Professor, Automobile Stream,
Wollo University, Kombolcha Institute of Technology (KIOT), Ethiopia

GRADES FOR STUDENTS

SL NO	REG NO	NAME	Presentatio n (20%)	Mid 20%	Assignmen t 10%	Final (50%)	Total (100%)	Grade
1	38090001	AATHISHANKARAN. K. S	20	20	10	11	61	C+
2	38090005	DHANAPRASATH. G	20	20	10	44	94	A+
3	38090008	JOHN BRUTTUS. R	20	20	10	11	61	C+
4	38090002	AMAN DINODIYA	20	20	10	11	61	C+
5	38090702	HARI PRASAD. CH	20	20	10	44	94	A+
6	38090019	SIVASURYA. P	20	20	10	37	87	A
7	38090003	BALA KABILAN. R	20	20	10	31	81	A-
8	38090703	HARISH. V	20	20	10	42	92	A+
9	38090020	SRIRAM. S	20	20	10	46	96	A+
10	38090004	DARVIN. V	20	20	10	2	52	C
11	38090006	EZHUMALAI A	20	20	10	44	94	A+
12	38090009	JOHN. B	20	20	10	37	87	A

13	38090010	KAMALINEE. S	20	20	10	31	81	A-
14	38090011	KARTHICK RAJA. S	20	20	10	42	92	A+
15	38090012	LOKESH. G	20	20	10	44	94	A+
16	38090013	MANI. C	20	20	10	37	87	A
17	38090014	NARESH. S	20	20	10	31	81	A-
18	38090015	NAVEEN. G	20	20	10	42	92	A+
19	38090016	NESARAJ.D	20	20	10	44	94	A+
20	38090017	RAGHAVENDRA. R	20	20	10	11	61	C+
21	38090018	SABEER KHAN. J	20	20	10	11	61	C+
22	38090021	VIGNESHWAR. M	20	20	10	44	94	A+
23	38090701	SHAIK VALI ABDUL HAQ	20	20	10	37	87	A
24	38090901	SAM THOMAS. U	20	20	10	37	87	A

GRADES FOR STUDENTS

NO	ID No	Name of Students	Sex	Presentation (20%)	Mid 20%	Assignment 10%	Final (50%)	Total (100%)	Grade
1	SGSE/0440/12	AMANUAL SEIFU	M	20	20	10	44	94	A+
2	SGSE/0441/12	DARIK ATNAFU	M	20	20	10	11	61	C+
3	SGSE/0442/12	HELEN AMSALU	F	20	20	10	11	61	C+
4	SGSE/0443/12	HUSSEN AHMED	M	20	20	10	44	94	A+
5	SGSE/0444/12	MANAYE NIGUS	M	20	20	10	37	87	A
6	SGSE/0445/12	MELESE WORKU	M	20	20	10	31	81	A-
7	SGSE/0446/12	AHMED ALI	M	20	20	10	42	92	A+
8	SGSE/0447/12	DAWIT ASERSE	M	20	20	10	46	96	A+
9	SGSE/0448/12	ABUDULAZIZE KASSAW	M	20	20	10	2	52	C
10	SGSE/0048/12	MUADH SOLOMON	M	20	20	10	30	80	A-
11	SGSE/0069/12	ABDULKERIM BELAY	M	20	20	10	1	51	C
12	SGSE/0471/12	JEMAL SEID	M	20	20	10	37	87	A

NO	ID No	Name of Students	Sex	Presentation (20%)	Mid 20%	Assignment 10%	Final (50%)	Total (100%)	Grade
1	SGSE/0246/13	BILAL SEID	M	20	20	10	35	85	A
2	SGSE/0245/13	ALI MOHAMMED YESUF	M	20	20	10	35	85	A
3	SGSE/0250/13	MULUKEN KASSAW	M	20	20	10	37	87	A

Grading system

A -Excellent
B -above average
C -satisfactory
D -unsatisfactory
F -failure
I -incomplete,
NG -no grade



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CERTIFICATE OF PARTICIPATION

PRESENTED TO



ABDULKERIM BELAY HAMZA

Second Year Automotive Engineering Part Time Post Graduate Student Who has Participated in "SHORT TERM SKILL DEVELOPMENT COURSE ON AUTOCAD" from 04 - 04 - 2021 to 25 - 04 - 2021 organized by School of Mechanical Engineering, Sathyabama Institute of Science and Technology, Chennai, India.

A handwritten signature in green ink.

Dr. S. PRABHAKAR

ASSOCIATE PROFESSOR
WOLLO UNIVERSITY
KOMBOLECHA INSTITUTE OF TECHNOLOGY
ETHIOPIA
(FACILITATOR)

A handwritten signature in blue ink.

Mr. J.R. DEEPAK

ASSISTANT PROFESSOR
SCHOOL OF MECHANICAL ENGINEERING
SATHYABAMA INSTITUTE OF SCIENCE AND
TECHNOLOGY, INDIA
(COURSE INSTRUCTOR)

A handwritten signature in blue ink.

Dr. S. PRAKASH

DEAN
SCHOOL OF MECHANICAL ENGINEERING
SATHYABAMA INSTITUTE OF SCIENCE AND
TECHNOLOGY, INDIA
(ORGANIZER)