Volume - IX, Issue - 1 (2023-24 A.Y)

NSRIT AUTONOMOUS

E-MINDS

DEPARTMENT OF EEE

Established in 2008, the Department of EEE has grown steadily, offering programs that cater to the evolving needs of the industry. The department began with a B. Tech program with an initial intake of 60 students in 2008, followed by the launch of an M. Tech program in Power Systems Control and Automation with 24 students in 2014.The department consists of qualified and dedicated faculty who serve as the key pillars supporting the department's growth and success in all aspects. Our curriculum and activities encompass key areas such as power systems, control systems, electrical machines, electromagnetic theory, and computer languages. They also integrate the latest advancements in rapidly growing fields like electric vehicles and renewable energy systems through honour and minor degree, which are essential for modern societal development and industrial progress

Department Vission

- To be a hub for imparting knowledge, skills and behaviour for exemplary contributions in the field of Electrical & Electronics Engineering

Department Mission

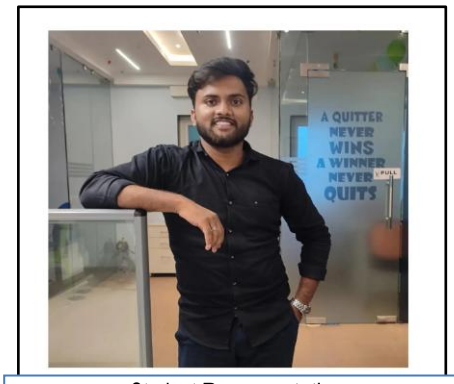
- M1: To impart technical education through the state-of-the-art infrastructural facilities, laboratories and instruction
- M2: To inculcate industry-oriented learning through industrial visits, internships, projects at industries, MoU's to make students technically skilled oriented
- M3: Creating conducive environment for higher education, employment and entrepreneurship throughquality education, professional skills and research
- M4: To promote societal environment among students by inculcating moral and ethical values

THE CREW

EDITORIAL MEMBERS

Chief Editor, Content Head
Dr. R.S.R. Krishnam Naidu,
Professor & HOD - EEE

Editor
Mr. A. Bala Raja Ram,
Asst., Professor



Student Representative
Mr. K. Uma Maheshwar,
IV-EEE

Student Representative
Mr. P. Sasi Vardhan,
III-EEE

Student Representative
Ms. G. Ramya,
II-EEE

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HOD Message:

It is a privilege and honour to lead the EEE department at this esteemed institution. Our field is at the heart of modern technological advancements, with a particular emphasis on the rapidly growing electric vehicle (EV) sector. This dynamic field encompasses core technologies like power systems, power electronics, electrical machines, control systems, and electromagnetic theory etc., all of which are critical to the development of efficient and sustainable transportation solutions.

To stay at the forefront of innovation, our departmental association, ADVAYA, organizes workshops, technical training, and expert guest lectures. These initiatives focus on emerging trends, including EV technologies, drone, IOT Technologies and aim to equip our students and faculty with the knowledge and skills needed to excel in this exciting domains.

Our department is committed to playing a pivotal role in shaping the future of electric mobility. By fostering research, development, and education in EV-related areas, we strive to create a sustainable and electrified transportation ecosystem.

Department Profile

Established in 2008, the Department of Electrical and Electronics Engineering (EEE) offers a range of programs, starting with a B.Tech program with an initial intake of 60 students in the same year. The department expanded its offerings to include a Diploma program in 2012 with a 60-student intake and an M.Tech (Power Systems Control and Automation) program in 2014 with a 24-student intake.

Our faculty is highly qualified, with 2 Ph.Ds and 12 M.Techs (4 of them are persuing Ph.D's in reputed universities). They are actively engaged in research and have published or presented papers in esteemed national and international journals and conferences.

The department recognizes the crucial role electrical engineers play in the growth of medium and large-scale industries. With India experiencing rapid industrial growth, the demand for electrical engineers has skyrocketed in various sectors, including the power sector, private companies, PSUs, and government organizations. This translates to a wealth of exciting career opportunities for our graduates.

Department Vision

To attain academic excellence in electrical and electronics engineering by imbibing ethical and moral values and contributing to society through research.

Department Mission

M1: To impart technical knowledge through quality education and creating conducive environment through state-of-the-art infrastructure and facilities.

M2: To promote industry – academician relationship for enhancing multidisciplinary research

M3: To imbibe core values of integrity, team work, professional ethics and societal responsibilities

Program Educational Objectives

PEO1: Demonstrate the real-world engineering problem solving skills by applying the fundamental and conceptual engineering knowledge as a practicing Electrical and Electronics engineer or as a member/lead in a multidisciplinary project setting that utilize 21st century skills

PEO2: Provide research-based engineering solutions addressing the triple bottom line of environment and sustainability maintaining the professional standards, ethics and integrity

PEO3: Foster self-directed learning through their professional experience, technology advancements in their relevant field of interest and desiring graduates pursue advanced higher education leading to research

Dr. R. S. R. Krishnam Naidu,

Professor & HOD- EEE

The following are the Activities and Achievements from the department of EEE during Jun to Aug, 2023:

S.No	Name of the Activity & Achievements	Organized by	Date of the Event	Page Numbers
1	5-Day Short Term Course on Design Thinking for Entrepreneurship	LPU	29-05-2023 to 03-06-2023	6
2	Extra-Curricular Activity by Student	IRSO	03-06-2023 to 05-06-2023	7
3	Expert Talk Based on Power System Operational Challenges with Inverter-Based Resources	IEEE	20-06-2023	7
4	Expert Talk based on "Recent Trends and Applications of Power Electronics in Industry"	IEEE	20-06-2023	8
5	Expert Talk based on "Applications of Power Electronics in the field of Renewables and EVs : Real Time Studies"	IEEE	20-06-2023	8
6	Faculty FDP certificate on "Innovations Driving the Future of Robotics"	Symbiosis University of Applied Sciences	01-07-2023	9`
7	Faculty FDP Certificates on "Recent Trends in Green Energy Initiatives and Soft Computing Techniques"	Department of EEE, MGIT, Gandipet, Hyderabad	11-07-2023 to 15-07-2023	9
8	Faculty FDP certificate on "FDM 3D printing: a game-changer for drone design and innovation"	Symbiosis University of Applied Sciences	17-07-2023	10
9	Faculty Certificates of Energy Literacy Earned	Energy Swaraj Foundation	29-07-2023, 31-07-2023	10

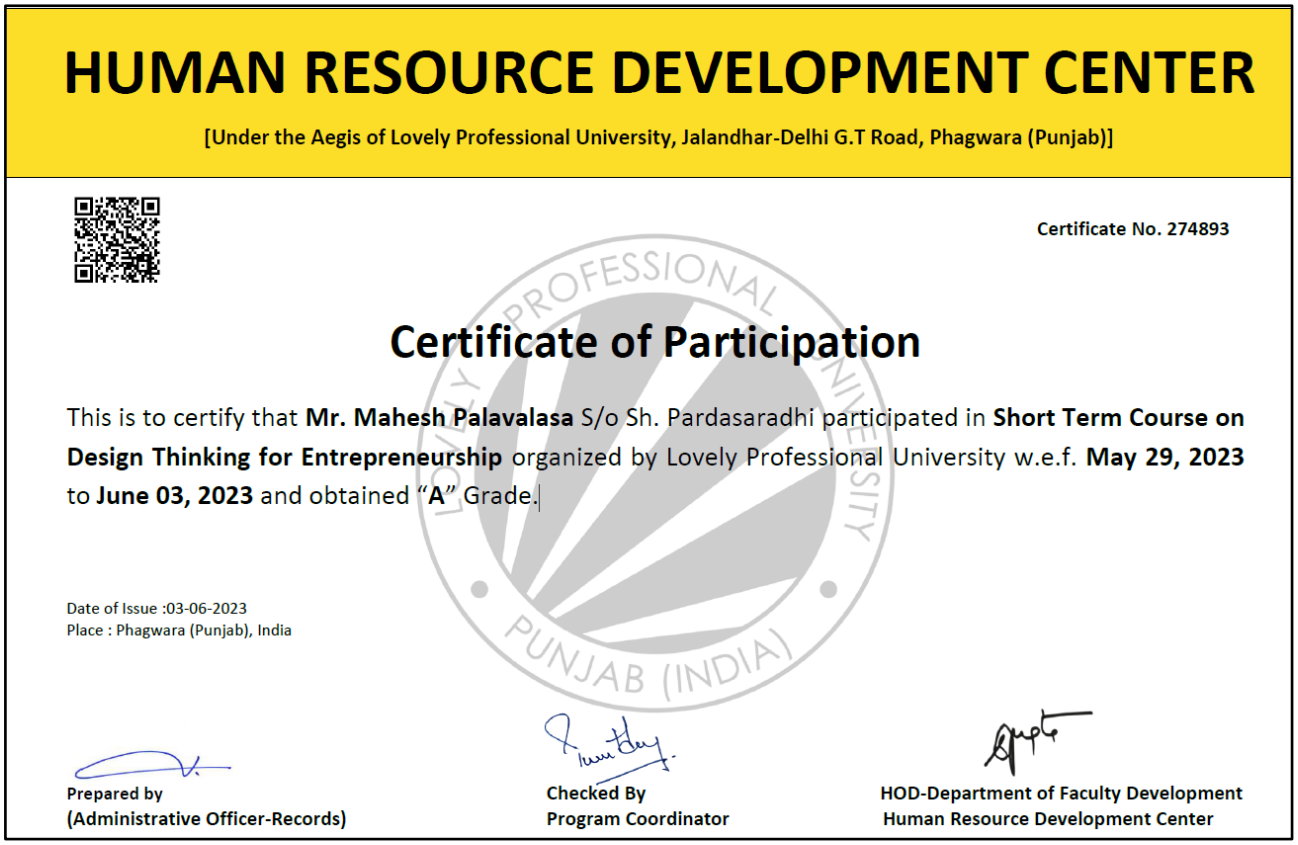
S.No	Name of the Activity & Achievements	Organized by	Date of the Event	Page Numbers
10	Student Certificates of Energy Literacy Earned	Energy Swaraj Foundation	29-07-2023, 31-07-2023	11
11	Online Training on Developing E-Content for Teaching and Learning of Mathematics	Central Institute of Educational Technology (CIET), NCERT	21-08-2023 to 25-08-2023	11

1. **5-Day Short Term Course on Design Thinking for Entrepreneurship**

This course focuses on equipping aspiring entrepreneurs and innovators with problem-solving skills using design thinking principles participants typically leave the course with:

- Practical tools to develop innovative business solutions.
- Enhanced creativity and user-centered design skills.
- The ability to implement **iterative design processes** to refine entrepreneurial ideas.

Our faculty **Mr. P. Mahesh** has participated in "**Short Term Course on Design Thinking for Entrepreneurship"** organized by Lovely Professional University w. e. f. **May 29, 2023** to **June 03, 2023** and obtained "**A**" Grade.



HUMAN RESOURCE DEVELOPMENT CENTER

[Under the Aegis of Lovely Professional University, Jalandhar-Delhi G.T Road, Phagwara (Punjab)]

Certificate No. 274893

Certificate of Participation

This is to certify that **Mr. Mahesh Palavalasa** S/o Sh. Pardasaradhi participated in **Short Term Course on Design Thinking for Entrepreneurship** organized by Lovely Professional University w.e.f. **May 29, 2023** to **June 03, 2023** and obtained "**A**" Grade.

Date of Issue :03-06-2023
Place : Phagwara (Punjab), India

Prepared by
(Administrative Officer-Records)

Checked By
Program Coordinator

HOD-Department of Faculty Development
Human Resource Development Center

2. **Extra-Curricular Activity by Student**

Our student **Mr. B. G. Chandra Sekhar** has also participated in "**IRSF Rope skipping national championship"** held at JES School & College Mumbai, Maharastra won **1st position.**

CERTIFICATE NO IRSF/MAY23/02.1
AADHAR NO

CERTIFICATE
OF MERIT/PARTICIPATION

THIS CERTIFICATE IS PROUDLY PRESENTED TO

NAME B. G. Chandra Sekhar

STATE Andhra Pradesh FOR PARTICIPATION IN

IRSF ROPE SKIPPING NATIONAL CHAMPIONSHIP, HELD AT JES SCHOOL & COLLEGE, MUMBAI, MAHARASHTRA, FROM 03-05 JUNE 2023.

AGE CATEGORY Above -17 (Boys) POSITION 1st

EVENT Double Dutch Speed Relay 4x45 seconds

INDIAN ROPE SKIPPING FEDERATION IS AFFILIATED TO
INTERNATIONAL ROPE SKIPPING ORGANISATION (IRSO), ASIAN ROPE SKIPPING ASSOCIATION (ARSA), WORLD INTER SCHOOL ROPE SKIPPING ORGANISATION (WIRSO), INDIAN ASSOCIATION OF SPORTS FOR ALL (I ASFA)
ROPE SKIPPING IS RECOGNIZED BY
ASSOCIATION OF INDIAN UNIVERSITIES (AIU), CENTRAL BOARD OF SECONDARY EDUCATION (CBSE), SCHOOL GAMES FEDERATION OF INDIA (SGFI), KENDRIYA VIDYALAYA SANGATHAN (KVS), NAVODAYA VIDYALAYA SAMITI (NVS) AND VIDYA BHARATI SANGATHAN (VBS)

VARSHA BAWA
PRESIDENT IRSF

CHANDRASHEKHAR DESHMUKH
SECY. GENERAL IRSF

SANDEEP M. GADE
SECRETARY IRSAM

International Rope Skipping Organisation IRSO

3. **Expert Talk based on Power System Operational Challenges with Inverter-Based Resources**

IEEE STUDENT BRANCH CHAPTER HBTUK Geo-Code STB11519
IEEE UP SECTION (INDIA) CH11025

CERTIFICATE
OF PARTICIPATION

This certificate is presented to

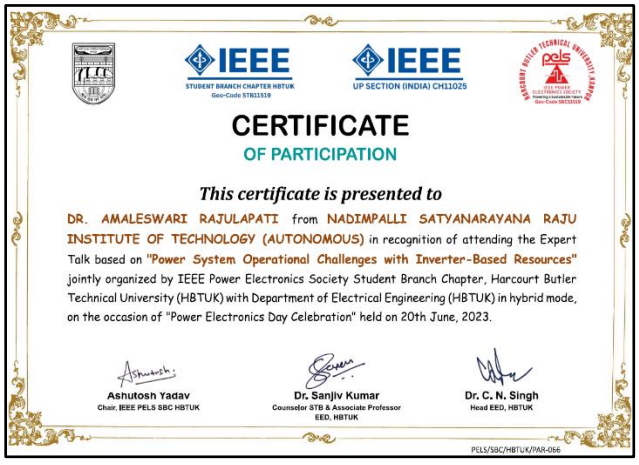
DR. R.S.R KRISHNAM NAIDU from NADIMPALLI SATYANARAYANA RAJU INSTITUTE OF TECHNOLOGY in recognition of attending the Expert Talk based on "Power System Operational Challenges with Inverter-Based Resources" jointly organized by IEEE Power Electronics Society Student Branch Chapter, Harcourt Butler Technical University (HBTUK) with Department of Electrical Engineering (HBTUK) in hybrid mode, on the occasion of "Power Electronics Day Celebration" held on 20th June, 2023.

Ashutosh Yadav
Chair, IEEE PELS SBC HBTUK

Dr. Sanjiv Kumar
Counselor STB & Associate Professor EED, HBTUK

Dr. C. N. Singh
Head EED, HBTUK

PELS/SBC/HBTUK/PAR-069



IEEE STUDENT BRANCH CHAPTER HBTUK Geo-Code STB11519
IEEE UP SECTION (INDIA) CH11025

CERTIFICATE
OF PARTICIPATION

This certificate is presented to

DR. AMALESWARI RAJULAPATI from NADIMPALLI SATYANARAYANA RAJU INSTITUTE OF TECHNOLOGY (AUTONOMOUS) in recognition of attending the Expert Talk based on "Power System Operational Challenges with Inverter-Based Resources" jointly organized by IEEE Power Electronics Society Student Branch Chapter, Harcourt Butler Technical University (HBTUK) with Department of Electrical Engineering (HBTUK) in hybrid mode, on the occasion of "Power Electronics Day Celebration" held on 20th June, 2023.

Ashutosh Yadav
Chair, IEEE PELS SBC HBTUK

Dr. Sanjiv Kumar
Counselor STB & Associate Professor EED, HBTUK

Dr. C. N. Singh
Head EED, HBTUK

PELS/SBC/HBTUK/PAR-066

Our faculty **Dr. R.S.R. Krishnam Naidu**, **Dr. R. Amaleswari**, **Ms. S. Yamini, Mr. K.M.M. Tarakesh** and **Mr. K. Naveen** has attended expert talk based on "**Power System Operational Challenges with Inverter-Based Resources"** orgnanized by IEEE Power Electronics Society Student Branch Chapter, Harcourt Butler Technical University held on **20th June 2023** could cover a wide range of critical issues faced by modern electrical grids as they integrate renewable energy sources like solar and wind.

4. **Expert Talk based on "Recent Trends and Applications of Power Electronics in Industry"**

Our faculty **Mr. T. Ramana** has attended expert talk based on "**Recent Trends and Applications of Power Electronics"** in industry orgnanized by IEEE Power Electronics Society Student Branch Chapter, Harcourt Butler Technical University held on **20th June 2023** covering state-of-art trends and methods in the area of power electronics.

CERTIFICATE

OF PARTICIPATION

This certificate is presented to

MR. RAMANA TOTADA from NSRIT in recognition of attending the Expert Talk based on "Recent Trends and Applications of Power Electronics in industry" jointly organized by IEEE Power Electronics Society Student Branch Chapter, Harcourt Butler Technical University (HBTUK) with Department of Electrical Engineering (HBTUK) in hybrid mode, on the occasion of "Power Electronics Day Celebration" held on 20th June, 2023.

Ashutosh Yadav, Chair, IEEE PELS SBC HBTUK

Dr. Sanjiv Kumar, Counselor STB & Associate Professor, EED, HBTUK

Dr. C. N. Singh, Head EED, HBTUK

PELS/SBC/HBTUK/PAR-160

5. **Expert Talk based on "Applications of Power Electronics in the field of Renewables and EVs : Real Time Studies"**

Our faculty **Mr. A.B.B. Ram** has attended expert talk based on "**Applications of Power Electronics In the Field of Renewables and EVs : Real Time Studies"** orgnanized by IEEE Power Electronics Society Student Branch Chapter, Harcourt Butler Technical University held on **20th June 2023**.

CERTIFICATE

OF PARTICIPATION

This certificate is presented to

MR. A.BALA RAJA RAM from NSRIT in recognition of attending the Expert Talk based on "Applications of Power Electronics in the Field of Renewables and EVs: Real Time Studies" jointly organized by IEEE Power Electronics Society Student Branch Chapter, Harcourt Butler Technical University (HBTUK) with Department of Electrical Engineering (HBTUK) in hybrid mode, on the occasion of "Power Electronics Day Celebration" held on 20th June, 2023.

Ashutosh Yadav, Chair, IEEE PELS SBC HBTUK

Dr. Sanjiv Kumar, Counselor STB & Associate Professor, EED, HBTUK

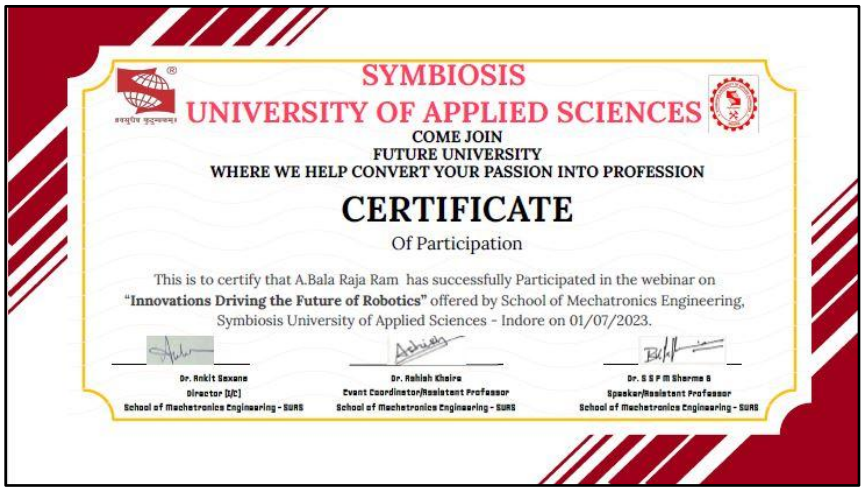
Dr. C. N. Singh, Head EED, HBTUK

PELS/SBC/HBTUK/PAR-114

6. **Faculty FDP certificate on "Innovations Driving the Future of Robotics"**

Webinar titled **"Innovations Driving the Future of Robotics: Unlocking the Power of Mechatronics,"** hosted by Symbiosis University of Applied Sciences, provided an in-depth exploration of the transformative advancements in robotics and their diverse applications across various sectors.

Our faculty **Mr. A.B.B. Ram** has attended and participated in the webinar on innovations driving the future of robotics orgnanized by Symbiosis University of Applied Sciences on **1st July 2023**.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WHERE WE HELP CONVERT YOUR PASSION INTO PROFESSION

CERTIFICATE

Of Participation

This is to certify that A.Bala Raja Ram has successfully Participated in the webinar on "Innovations Driving the Future of Robotics" offered by School of Mechatronics Engineering, Symbiosis University of Applied Sciences - Indore on 01/07/2023.

Dr. Rohit Saxena, Director (I/C), School of Mechatronics Engineering - SUAS
Dr. Rahish Khaire, Event Coordinator/Assistant Professor, School of Mechatronics Engineering - SUAS
Dr. S S P M Sharma S, Speaker/Assistant Professor, School of Mechatronics Engineering - SUAS

7. **Faculty FDP certificate on "Recent Trends in Green Energy Initiatives and Soft Computing Techniques"**

The convergence of **green energy initiatives** and **soft computing techniques** offers tremendous potential for optimizing the renewable energy sector. As renewable energy becomes a larger part of global energy systems, these technologies will continue to evolve, addressing challenges related to grid stability, resource variability, and efficiency.

Our faculty **Mr. A.B.B. Ram** has attended for one week national level online faculty development programme on **Recent Trends in Green Energy Initiatives and Soft Computing Techniques organized by** Department of EEE, MGIT, Gandipet, Hyderabad held from **11th July 2023** to **15th July 2023**.


MAHATMA GANDHI
INSTITUTE OF TECHNOLOGY (Autonomous)
Kokapet(Village), Gandipet, Hyderabad, Telangana – 500075. www.mgit.ac.in
MOTIVATE INNOVATE EMPOWER 26 YEARS

Certificate of Participation

This is to certify that **Mr. A.Bala Raja Ram , Assistant Professor** from **NSRIR** has actively participated in A One-week National Level Online Faculty Development Programme on **"Recent Trends in Green Energy Initiatives and Soft Computing Techniques"** from 11-07-2023 to 15-07-2023 organized by the Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Gandipet, Hyderabad.

Mr.G.Arun Kumar, Asst. Professor, Convenor
Dr.P.Nagasekhar Reddy, Associate Professor, Convenor
Dr.P.Ram Kishore Kumar Reddy, Professor & HoD
Prof. G. ChandraMohan Reddy, Principal

8. **Faculty FDP certificate on "FDM 3D printing: a game-changer for drone design and innovation"**

A webinar titled **"FDM 3D Printing: A Game Changer for Drone Design and Innovation,"** hosted by Symbiosis University of Applied Sciences, Indore, and conducted by **Dr. Ashish Khaira**, explored the transformative impact of Fused Deposition Modeling (FDM) 3D printing on drone design and innovation. FDM 3D printing enables engineers to quickly prototype and refine drone components, accelerating development cycles and reducing costs. The technology allows for the creation of tailored drone components to meet specific mission requirements, enhancing functionality and performance.

Our faculty **Mr. A.B.B. Ram** has attended and participated in the webinar on FDM 3d printing: a game-changer for drone design and innovation orgnanized by Symbiosis University of Applied Sciences on **17th July 2023**.


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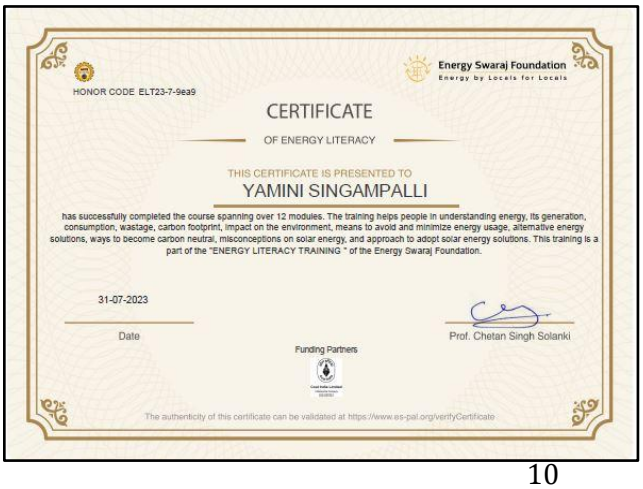
CERTIFICATE
Of Participation
This is to certify that Mr.A.Bala Raja Ram has successfully Participated in the webinar on "FDM 3D printing: a game-changer for drone design and innovation" offered by School of Mechatronics Engineering, Symbiosis University of Applied Sciences - Indore on 17/07/2023.
Dr. Ankit Saxena
Director (I/C)
School of Mechatronics Engineering - SUAS
Dr. S S P M Sharma S
Event Coordinator/Assistant Professor
School of Mechatronics Engineering - SUAS
Dr. Ashish Khaire
Speaker/Assistant Professor
School of Mechatronics Engineering - SUAS

9. **Faculty Certificates of Energy Literacy Earned**

Our faculty **Dr. R.S.R. Krishnam Naidu**, **Ms. S. Yamini**, **Mr. K.M.M. Tarakesh** and **T. Ramana** have earned the "**Certificate of Energy Literacy"** by Energy swaraj foundation.This training consists of 12 modules, each about 10-15 minutes long, which educate participants on energy generation, consumption, its environmental impacts, and sustainable energy practices. The training is designed to raise awareness about the importance of energy conservation and transitioning to renewable energy sources, which is crucial in addressing climate change.

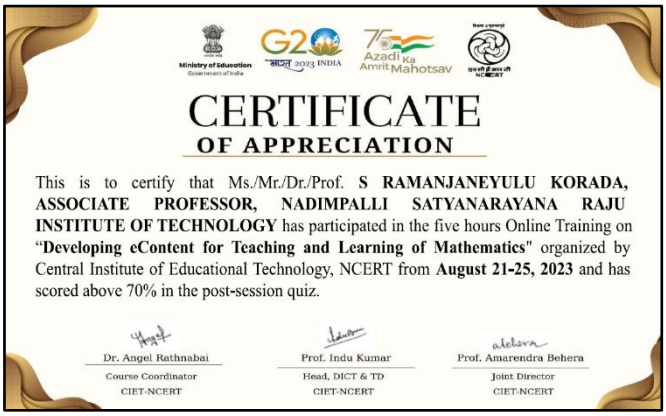

Energy Swaraj Foundation
Energy by Locals for Locals
HONOR CODE: ELT23-7-a0b3
CERTIFICATE
OF ENERGY LITERACY
THIS CERTIFICATE IS PRESENTED TO
Dr. RSR KRISHNAM NAIDU
has successfully completed the course spanning over 12 modules. The training helps people in understanding energy, its generation, consumption, wastage, carbon footprint, impact on the environment, means to avoid and minimize energy usage, alternative energy solutions, ways to become carbon neutral, misconceptions on solar energy, and approach to adopt solar energy solutions. This training is a part of the "ENERGY LITERACY TRAINING " of the Energy Swaraj Foundation.
29-07-2023
Date
Prof. Chetan Singh Solanki
Funding Partners
The authenticity of this certificate can be validated at https://www.es-pal.org/verifyCertificate


Energy Swaraj Foundation
Energy by Locals for Locals
HONOR CODE: ELT23-7-9ea9
CERTIFICATE
OF ENERGY LITERACY
THIS CERTIFICATE IS PRESENTED TO
YAMINI SINGAMPALLI
has successfully completed the course spanning over 12 modules. The training helps people in understanding energy, its generation, consumption, wastage, carbon footprint, impact on the environment, means to avoid and minimize energy usage, alternative energy solutions, ways to become carbon neutral, misconceptions on solar energy, and approach to adopt solar energy solutions. This training is a part of the "ENERGY LITERACY TRAINING " of the Energy Swaraj Foundation.
31-07-2023
Date
Prof. Chetan Singh Solanki
Funding Partners
The authenticity of this certificate can be validated at https://www.es-pal.org/verifyCertificate

10. **Students Certificates of Energy Literacy Earned**

Our students **Jagadeesh**, **Chandra Sekhar** and **59** others have earned "**Certificate of Energy Literacy"** by energy swaraj foundation.

11. **Online Training on Developing e-content for teaching and learning of mathematics**



Our faculty and students have participated in five hours online training on Developing e-content for teaching and learning of mathematics.The *Central Institute of Educational Technology (CIET)*, a part of NCERT, offers an online training series on **"Developing eContent for Teaching and Learning of Mathematics."** This program focuses on enhancing the teaching and learning experience through the integration of technology and digital tools like *GeoGebra*, promoting interactive, flexible, and personalized learning experiences.The training aims to equip participants with skills to create dynamic and engaging content for topics such as 2D and 3D geometry, calculus, and more. The training series typically takes place every fourth week of the month. The **August 2023** session ran from **21st** to **25th** and featured live sessions on topics like using Free and Open Source Software (FOSS) to develop interactive mathematical resources.