



DEC 2021



Shram Sadhna Bombay Trust's College of Engineering & Technology, Bambhori, Jalgaon



Our Inspiration



Smt. Pratibhatai Patil

Former
President of India
&

Dr. D. R. Shekhawat

Former Chairman

VISION

To emerge as the leading
Electrical Engineering
department for inclusive
development of students.

MISSION

To provide student-
centered conducive
environment for
preparing knowledgeable,
competent and value
added electrical
engineers.



Shri. Raosaheb Shekhawat
Chairman & Managing Trustee

Department of Electrical Engineering

SHOCKWAVES (Newsletter) Volume-IX, Issue-I

Research Grant Received



Mr. Nilesh S. Mahajan, Assistant Professor, Electrical Engineering Department have received an financial assistance of amount Rs. 3,00,000/- for research project under "Rajiv Gandhi Science & Technology Commission (RGS&TC), Government of Maharashtra" through "Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon" for a project Topic "Design, development and testing three phase multilevel inverter to improve quality issues in solar photovoltaic based drive applications.

Faculty Publication



Mr. Suhash M. Shembekar, Assistant Professor, Electrical Engineering Department has presented a paper on "A Review on Performance of Distance Protection of Transmission Line Under Different Operating Conditions" at International Conference, IEMRE - 2022, organized by Institute of Engineering & Management, Kolkata on 25th - 27th February 2022.

PROGRAM OUTCOMES(POs)

1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems
2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES(PSOs)

1	Apply principles of engineering, electronics and computer science; basic science, mathematics (including differential equations, discrete mathematics and linear algebra) and laboratory skills for building, testing, operation and maintenance of electrical systems.
2	Model, analyse, design, and realize physical systems, components or processes related to electrical engineering systems.
3	Be prepared to work professionally in power systems engineering, control systems engineering and software industries.

Guest Lecture by Faculty



Mr. A. S. Zope, Head Department of Electrical Engineering, Government Polytechnic Jalgaon felicitating Mr. M.M. Ansari, Assistant Professor, SSBT's CoET, Jalgaon by offering bouquet



Mr. M. Mujtahid Ansari, Assistant Professor, Electrical Engineering Department delivered Guest Lecture at Government Polytechnic, Jalgaon on topic "On-Grid Rooftop PV Solar Power Plant Installation and Performance Assessment" on 9th March, 2022.

The objectives of lecture:

1. Advantages of On-Grid Rooftop PV Solar Power Plant.
2. Site survey technical and economical feasibility.
3. Rules and procedure to get permission and approval from government Agencies.
4. Selection of PV modules and Inverter.
5. Installation of PV Solar Power Plant.
6. Performance assessment and payback period calculations.

Outcome of Lecture:

Students will able to

1. Understand the importance of On-Grid Rooftop PV Solar Power Plant in view of present energy scenario.
2. Exercises technical and economical feasibility.
3. Select the optimal capacity of plant and select PV modules and inverters.
4. Know the procedure and necessary documentation for Net-Metering connection.
5. Budget the bill of material and execute the installation of Rooftop PV Solar Power Plant.
6. Select a carrier as an entrepreneur

MoU Signed by Department

A Memorandum of Understanding (MoU) is a formal agreement between two or more parties. Companies and organizations can use MoUs to establish official partnerships.

Purpose of MoU

The purpose of Department MoU with Industry can minimize the gap between learning and carrier opportunity. The industry has many new technology requirements, so **industry-academic interaction** plays a vital role in the **placements and carrier growth for the students**. We have signed MoU with the following Academic and industry Institutes. The MoU is intended to recognize the general basis for a cooperative and a collaborative working relationship between the two parties. The purpose of MoU is to have mutual intentions to jointly work on projects required for industries and research needs, with learned faculty of good industrial experience and promising students, jointly agree to exchange their expertise for mutual benefit and growth, on the areas specified below:

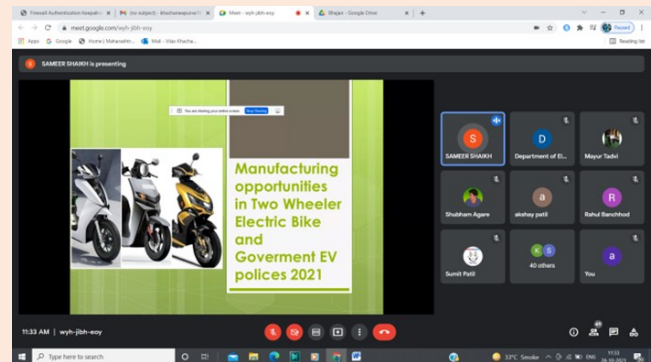
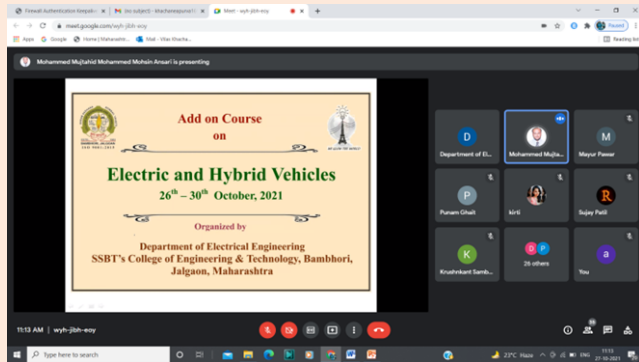
- Industrial Visits
- In-plant Training & special Technical Training to make the students industry-ready
- Guest Lectures
- Mini Projects and Main Project Work
- Research & Development
- Problem Solving
- Studies & Survey
- Placements
- Internships
- Establishing Advanced Labs

S.N.	Name of Institute/Industry	Date of Signed MoU	Duration of MoU
1	7 P arallels Tectrno-Consultants Pvt. Ltd. Llnit1.6, Lotus Star, Plot No. D-5 Cross Road N o.20, MIDC, Andheri tE), Mumbai-40 0 09 3 Maharashtra	13 th Sep , 2021	Two Years
2	Automation Services & Prolific Systems & Technologies Pvt. Ltd. PLC & SCADA Automation Training, 36, Preet Chamber, Mumbai-Pune highway, Wakadewadi, Shivajinag ar, Pune -411003, Mah arashtra	13 th Sep , 2021	Two Years
3	7 P arallels Tectrno-Consultants Pvt. Ltd. Llnit1.6, Lotus Star, Plot No. D-5 Cross Road N o.20, MIDC, Andheri tE), Mumbai-40 0 09 3 Maharashtra	10 th Jan, 2022	Two Years

Activities Conducted

Add-On Course on “Electric and Hybrid Vehicles”

Department has conducted an Add-on Course on topic “Electric and Hybrid Vehicles” on 26th to 30th Oct 2021 (30 Hours Duration) in online mode for students of Electrical Engineering Department. The purpose of Add-On Course is to provide a career-oriented course and bridge the gap curriculum. The aim of the program is to disseminate knowledge about Electric Vehicles and its future scope. Economical and Environment impact of Electric and Hybrid Vehicles.



Objective of Add-on Course

Able to understand the basics of electric and hybrid electric vehicles, their architecture, technologies and fundamentals. The course overviews the hybrid electric vehicle architecture, design and component sizing and the power electronics devices used in hybrid electric vehicles. Explore the knowledge of energy storage technologies used for hybrid electric vehicles and their control.

Description about the Add-on Course

The course introduces the fundamental concepts, principles, analysis and design of hybrid and electric vehicles. The material for this course will be prepared in such a manner that it helps the post-graduate students, teachers, practitioners and final year undergraduate students.

The course goes deeper into the various aspects of hybrid and electric drive train such as their configuration, types of electric machines that can be used, energy storage devices, etc. Each topic will be developed in logical progression with up-to-date information.

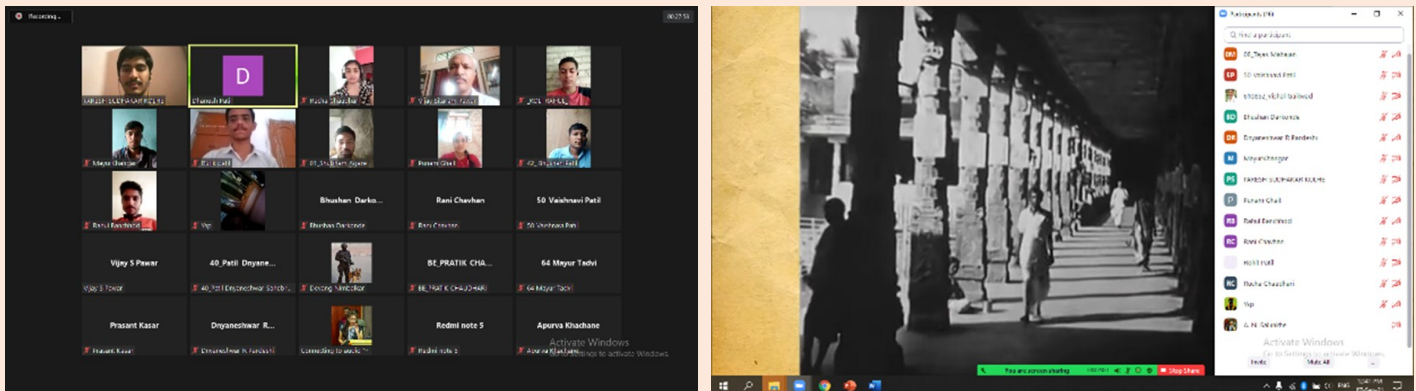
Outcome of Add-on Course

After successful completion of the course the student will be able to:

1. Explain the basics of electric and hybrid electric vehicles, their architecture, technologies and fundamentals.
2. Analyze the use of different power electronics devices and electrical machines in hybrid Electric vehicles.
3. Explain the use of different energy storage devices used for hybrid electric vehicles, their technologies and control and select appropriate technology
4. Interpret working of different configurations of electric vehicles and its components, hybrid vehicle configuration, performance analysis and Energy Management strategies in HEVs.
5. Analyze the use of different energy management strategies used in hybrid and electric vehicles

Activities Conducted

Teachers Day



Department under EESA has celebrated Teachers day on 07/09/2021 in Online mode. The aim of the celebration is to raise awareness about the role of teachers in playing quality education at all levels and to improve the situations of teachers in the world.

Teachers' Day in India is celebrated on 5th September to commemorate the birth anniversary of Dr. Sarvepalli Radhakrishnan. He was a renowned scholar, recipient of Bharat Ratna, first Vice- President, and second President of independent India. He was born on 5 September, 1888. As an educationist, he was an advocate of edification and was a distinguished envoy, academician, and above all a great teacher.

Amidst the pandemic, Electrical Engineering Students Association EESA, Department of Electrical Engineering, SSBT's College of Engineering and Technology, Bambhori, Jalgaon celebrated this day with great enthusiasm through the Zoom app on 7th September, 2021 at 12 p.m. The whole event was meticulously planned by EESA members. The program was hosted by Mr. Paresk Kolhe (EESA student Coordinator). A video about Teachers Day in hindi is shown to all students which shows the biography of Dr. Sarvepalli Radhakrishnan. Ms. Rucha Chaudhari and Mr. Mayur Khangar spoke on the importance of celebrating Teachers Day and also on the inherent qualities of the teachers. A motivational speech given by Mr. V. S. Pawar (HOD, Electrical) on importance of student teacher relationship and positive learning environment for the students. Program was concluded by vote of thanks.

Objective of Program

The objective of the program is to

1. Mark the birthday of the country's former President, scholar, philosopher and Bharat Ratna awardee, Dr. Sarvepalli Radhakrishnan
2. Celebrate the role played by teachers in community upliftment.
3. Honor teachers for their contribution in impacting knowledge among people in the society.
4. Remind the country of the importance of teachers.

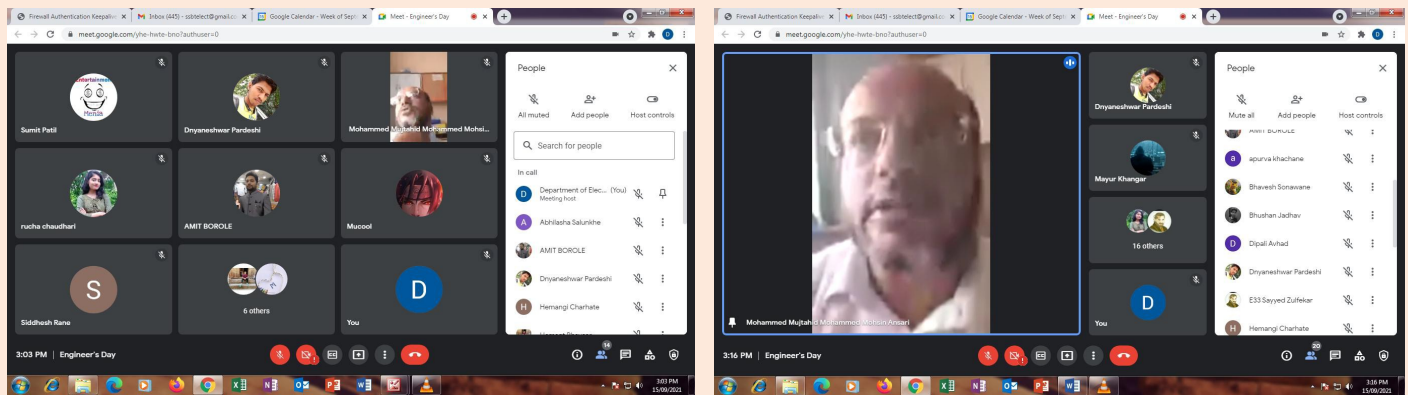
Outcome of Program

The program helps the students to

1. Recognize the central role teachers play in nurturing and guiding infants, children, youth and adults through the lifelong learning process.
2. Celebrate knowledge and its role in societal advancement.
3. Appreciate the great scholars that have made tremendous contributions in academia.

Activities Conducted

Engineers Day



Department under EESA has celebrated Engineers day on 15/09/2021 in Online mode. The aim of the program is to appreciate the contribution of engineers and to mark remembrance and tribute to Sir Mokshagundam Visvesvaraya, who is considered as one of the greatest engineers in the country.

Engineers Day is an annual event to be celebrated in India. The nation commemorates it on the 15th of September every year. The day is dedicated to the engineers of the nation for their contribution in making society a place to live. This event has a grand celebration in the educational institutions related to engineering and technology. The day inspire the students, especially engineering students, to put their all effort towards their goal and to commemorate the great engineer and statesman of the history of India Sir Mokshagundam Visvesvaraya.

Engineers Day is a very significant national event, celebrated especially in the educational institutions related to the fields of engineering. Electrical Engineering Students Association EESA, Department of Electrical Engineering, SSBT's College of Engineering and Technology, Bambhori, Jalgaon has organized the Engineer's Day on 15/09/2021 through the online platform Google meet at 03:00 pm. This is a very special day for engineering students. Students decorate and set a photo of Sir Mokshagundam Visvesvaraya with a fresh garland on it. A video about Engineers Day is shown to all students which show the biography of Sir Mokshagundam Visvesvaraya. Students and teachers deliver the speech on Sir Mokshagundam Visvesvaraya life so that the students can take inspiration from him. All the celebrations of the day remain focused on motivating students and telling them the scopes of engineering in the modern era.

Objective of Program

The objective of the program is to

1. Take a pledge to promote and encourage the youth to select for Engineering education.
2. Produce quality Engineers for the bright future of our country.

Outcome of Program

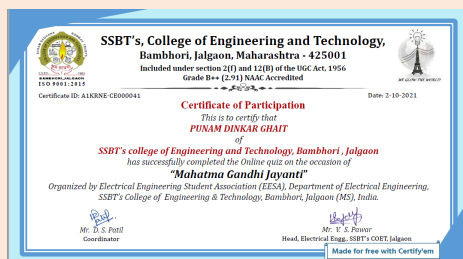
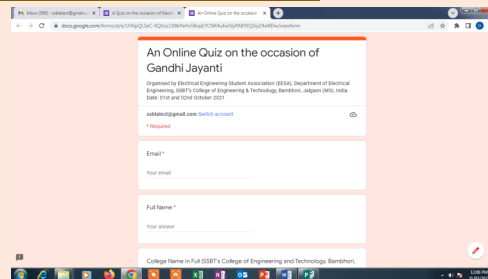
The program helps the students to

1. mark the achievement of India in engineering as the engineers are now working abroad as well and are employed in many foreign companies.
2. make them realize that they are doing one of the best jobs in the world.

Activities Conducted

Gandhi Jayanti

In order to inculcate the feeling of patriotism, social responsibilities and a general awareness related to Gandhiji an online quiz competition is organized by Electrical Engineering Student Association (EESA), Department of Electrical Engineering on 1st and 2nd October 2021 on the birth anniversary of great leader Mahatma Gandhi. Students voluntarily participate in the Quiz Competition.



The aim of the quiz is to create awareness among students related to cleanliness, patriotism and social responsibilities. Cleanliness is the hygiene that one must follow in everyday life! Cleanliness is important in order to stay healthy and away from diseases.

Objective of Program

To determine an individual's skill or propensity to succeed in a given activity. It represents a person's level of competency to perform a certain type of task.

Outcome of Program

1. To get aware about the historical moments and Mahatma Gandhi
2. To rise a good character by keeping body, mind, and soul clean and peaceful.

Quiz Master



To reinvent the education system and give students a break from traditional classroom learning, Quiz master event was organized on 02nd December 2021 with an innovative ideas under EESA. The quiz was designed containing special effects and is displayed on LCD projector its just like KBC style quiz since technology can act as a facilitator by bringing innovation to quizzes and ensuring active participation among students. The quiz master was hosted by Mr. D. S. Patil. Five teams have participated to make the competition successful. The name of the teams were interesting and based on electrical related terms such as Current, Frequency, Voltage. Power and Energy. The winners for this competition are group Current & group Energy.

Objective of Program

The Objective behind to organize Quiz competition is to evaluate the knowledge of the participants within academics as well as beyond academics and to make them familiar with the prospects of quizzes and the objectivity of the questions. The main purpose of the competition to develop interest in subject areas of General knowledge, Electrical Terms including competitive aspects.

Outcome of Program

- The program helps the students to
1. Get a Interactive platform
 2. Changing scope of learning
 3. Encourages team work
 4. Motivate learners, help them remember what they learned, and assess what they learned.

Activities Conducted

Placement Details

Sr. No.	Name of student	Name of company	Designation	Package LPA	Hometown	Photo
1	Mr. Rohit A Patil	TCS	Assistant System Engineer-Trainee	3.36	Jalgaon	
2		Wipro	Project Engineer	3.5	Jalgaon	
3	Mr. Vaibhav Patil	Atos Syntel	Trainee Engineer	3.5	Jalgaon	
4	Mr. Mayur Chaudhari	Mastek Controls Pvt Ltd Jalgaon	Trainee Engineer	1.44	Jalgaon	
5	Mr. Nayan Wankhede	Hexaware Technologies	Software Engineer Trainee	4.0	Khamgaon	
6		Capgemini	Analyst	4.0	Jalgaon	
7	Mr. Akshay B Patil	Capgemini	Analyst	4.0	Jalgaon	

Activities Conducted

Placement Details

Sr. No.	Name of student	Name of company	Designation	Package LPA	Hometown	Photo
8	Mr. Haresh S Gurav	Capgemini	Analyst	4.0	Jalgaon	
9		Infosys Ltd	System Engineer	3.6	Jalgaon	
10	Mr. Nandkishor R Khandare	Capgemini	Analyst	4.0	Pimparkhed (Buldana)	
11	Mr. Siddharth M Salunkhe	BYJU'S	Business Development Trainee	5.0	Jalgaon	
12		Infosys Ltd	System Engineer	3.6		
13	Mr. Prashant C Wagh	Infosys Ltd	System Engineer	3.6	Jamner	
14	Mr. Swapnil S Kharate	Infosys Ltd	System Engineer	3.6	Jalgaon (Jamod)	
15		Capgemini	Analyst	4.0	Jalgaon (Jamod)	
16	Miss Rucha S Chaudhari	Infosys Ltd	System Engineer	3.6	Jalgaon	
17	Mr. Durgesh D Patil	Capgemini	Analyst	4.0	Surat	

Activities Conducted

Result 2021-22 UG (As per CGPA)

TE



Patil Bhushan Sandip
CGPA: 9.87
Ist Topper



Bhangale Aachal Hemchandra
CGPA: 9.82
IInd Topper



Patil Samir Chetan
CGPA: 9.77
IIIrd Topper

BE



Patil Mahima Anil
CGPA: 9.43
Ist Topper



Chaudhari Rucha Sharad
CGPA: 9.33
IInd Topper



Sapkale Jayshree Subhash
CGPA: 9.33
IInd Topper



Gangasagar Sanjan G.
CGPA: 9.23
IIIrd Topper

Newsletter Committee

Faculty Members :

Mr. V. S. Pawar (Editor)

Mr. D. S. Patil (Designer)

Student Coordinators:

Mr. Paresh Kolhe (BE)

Ms. Kirti Koli (BE)



Dr. G. K. Patnaik
Principal



Dr. S. B. Pawar
Vice-Principal



Mr. V. S. Pawar
Head, Electrical Engg. Dept.