2022-2023

NEWSLETTER

DEPARTMENT OF ELECTRICAL ENGINEERING

The Circuit: Connecting Knowledge & Innovation

DEPARTMENT OF ELECTRICAL ENGINEERING
AJAY BINAY INSTITUTE OF TECHNOLOGY

VISION OF THE INSTITUTE

To promote quality teaching, exploration, research and facilitate holistic development of students that would help create capable technical manpower needed for industry and academia.

MISSION OF THE INSTITUTE

M1: To enable efficiency and prosperity in the society through application of technical knowledge and in collaboration with industry and other institutions.

M2: Ensure an effective teaching on contemporary topics and a rational examination system.

M3: Support and create centers of excellence for exploratory technical and behavioral projects that would promote originality and uniqueness.

M4: Establish partnership with local industries for collaborating, understanding and addressing real life technical challenges.

DEPARTMENT OF ELECTRICAL ENGINEERING

AJAY BINAY INSTITUTE OF TECHNOLOGY

VISION OF THE DEPARTMENT

To become a leader in bringing out proficient Electrical Engineers, academicians and entrepreneurs and thereby contribute values to knowledge-based economy and society.

MISSION OF THE DEPARTMENT

M1 : To impart high quality technical education, & promote research activities among the students enabling them to excel as innovative and globally competent professionals.

M2 : To bridge the gap between industry and academia by fostering student development initiatives that meet industry needs.

M3 : To develop expertise in complex technical problem-solving skill among the students through application-based learning approach.

M4 : To nurture ethical and socially responsible engineers by providing an educational environment that emphasizes professional integrity, creativity, and teamwork.

DEPARTMENT OF ELECTRICAL ENGINEERING

AJAY BINAY INSTITUTE OF TECHNOLOGY

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

PEO1 : Apply technical knowledge to solve complex engineering problems, emphasizing ethics, social responsibility, and professional integrity.

PEO2 : Excel in various engineering roles such as design, research, testing, and manufacturing, with skills tailored to meet industry demands.

PEO3 : Engage in continuous learning to enhance their professional skills, fostering innovation and leadership in their respective fields.

PEO4 : Demonstrate creativity and entrepreneurial spirit in developing sustainable solutions to engineering challenges.

PEO5 : Contribute positively to society by applying their engineering expertise to address societal needs, while upholding ethical standards and social commitment.

PROGRAM SPECIFIC OUTCOMES (PSOS)

PSO1. Apply electrical engineering knowledge to design and solve complex electrical and power system problems, ensuring safety and sustainability.

PSO2. Use modern tools and techniques to model, analyze, and improve electrical systems in areas like power and automation.

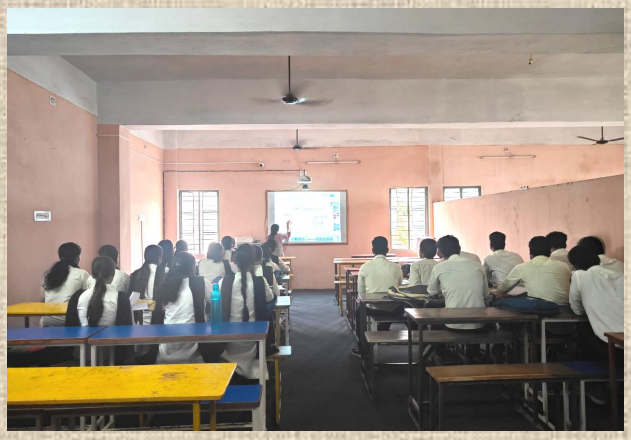
PSO3. Demonstrate project management, teamwork, and ethical skills to contribute to engineering projects that address societal and environmental challenges.

ANNUAL NEWSLETTER – 2022-23

DEPARTMENT OF ELECTRICAL ENGINEERING

AJAY BINAY INSTITUTE OF TECHNOLOGY, CDA, SECTOR-1, CUTTACK

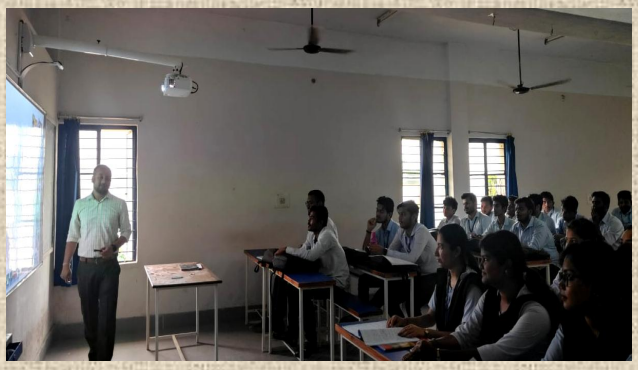
A Seminar was conducted by the Department of Electrical Engineering on "Non-Conventional Energy Sources Scenario in Odisha" on 28.11.2022. Er. Chandan Kumar Barik, Director, AAEC, Cuttack was the speaker for the Seminar who gave knowledge on how renewable energy can be used to provide power to remote and underserved areas, improving access to electricity for millions of people, it's Versatility i.e. how Solar energy can be used for a variety of applications, including power generation, heating, and lighting.



An expert talk by Er. Suven Nath, Deputy Manager, OMC, Odisha on "Sustainability & Energy Efficiency in Mining Industry" was conducted on 18.08.2022 by Department of Electrical Engineering. 52 students have participated in the Programme. Er. Suven Nath gave knowledge on several aspects in the mining value chain where energy efficiency can be improved, such as managing electricity demand, capturing waste heat, improving ventilation, reducing mine drainage & generating energy from by-products.

A Seminar on "Significance of Entrepreneurship Education and Market Orientation" was conducted by Department of Electrical Engineering from 17.02.2023 to 18.02.23.Mr. Suvendu Moharana, Director at Voip Tech Solutios was the resource person and Chief Speaker for the event. This seminar aims to provide an opportunity for faculty members and students to enhance their skills in entrepreneurship development and promote entrepreneurship culture in the department.

A 5-Day Student Development Workshop on “Introduction to MATLAB, Power World Simulator & Their Applications” organised by ABIT's Centre of Applied Research (Energy Efficiency & Sustainability) from 17.01.2023 to 21.01.2023 for 3rd Year Electrical Engineering Students. Asst. Prof Jagannath Patra, DUIET was conducted the workshop.



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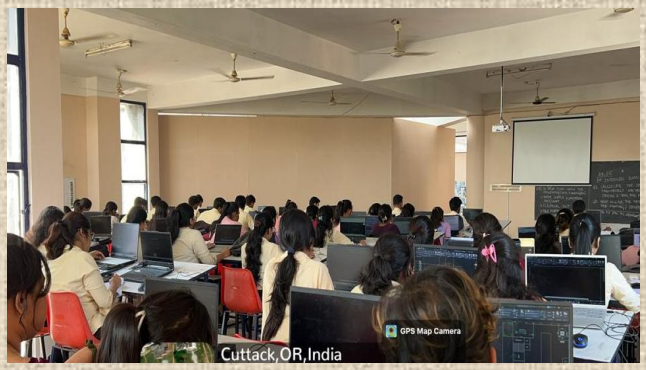
A Seminar was conducted by the Department of Electrical Engineering on "Cyber Security of Smart in Odisha” on 01.03.2023. Er. D.M. Sahoo, AGM, GRIDCO Cuttack was the speaker for the Seminar who gave knowledge on how Smart grids are protected from cyberattacks and that the power supply remains reliable and uninterrupted.

A Student Development Workshop on “Relay Logic Control (RLC)” organized by ABIT's Centre of Applied Research (Energy Efficiency & Sustainability) From 25.05.2023 to 26.05.2023 for 3rd Year Electrical Engineering Students under the supervision Er. Omkar Nath Majhi, Branch Head, K Infotech & Engg. Services. The aim of the workshop was to Students understand and hands-on training in FLUID SIM software and CAD applications.



FACULTY PUBLICATION (JOURNAL / CONFERENCE /BOOK CHAPTER)

1. Prof. Debayani Mishra published a paper titled “Frequency Management of an Interconnected Power System using Modified Differential” in International Journal of

Renewable Energy and Research, 2023.

2. 2.Prof. Debayani Mishra published a paper titled "A Key to Sustainable Development- Solar Powered Water Cooling" in Journal of Engineering Innovation and Research, 2023.

3. Prof. Durgamadhab Swain published a paper titled "A Key to Sustainable Development- Solar Powered Water Cooling" in Journal of Engineering Innovation and Research, 2023.

4. Prof. Shubha laxmi Mohapatra published a paper titled "Microstrip-line fed Dual-band C-shaped Antenna with Monopolar Characteristics for Application in WLAN" in IEEE Xplore,2023.

5. Prof. Shubha laxmi Mohapatra published a paper titled "A Planar Concentric Circular Ultra-wideband 5/6 GHz Notch Antenna for Wireless Application" in, IEEE International Conference ,2023.

6. Prof. Shubha laxmi Mohapatra published a paper titled "A Dual-band Slotted Antenna with an Asymmetrical T-shaped Stub for Application in WLAN Systems" in, IEEE International Conference ,2023.

STUDENT PUBLICATION

1. Mr. Chandrasekhar Sahoo and Mr. Tarenee Prasad Moharana published a paper titled "Solar Panel Based Street Light System with MPPT Technique" in UGC CARE, 2022.
2. Mr. Jeeban Samrat Samal published a paper titled "IoT Based Health Monitoring System" in UGC CARE ,2022.
3. Mr. Priyanshu Mohanty , Mr. Samira Behera and Mr. Satyajit Sethi Samal published a paper titled "Solar Panel Cleaning Robot with Autonomous Charging" in UGC CARE 2022.

STUDENT ACHIEVMENTS:

1. Prabin Mohapatra participated and secured 3rd Position in ROBOWAR in the Ekathra (Technical and Cultural Fest), Dubsmash, organized by the Gandhi Institute of Technology and Management (GITAM), Gangapada, Nilakanthapur, Odisha- 752054, held from 8th to 10th September 2022.

2. Ashutosh Dhal participated and secured 2nd Position in Biz War in VASANTIKA (Cultural), Biz War, organized by the Einstein Academy of Technology and Management (EATM), Bhubaneswar 752060, Odisha held from 26th to 27th September 2022.

3. Goura Prasad Behera and Gulsan Kumar Nayak participated and secured 2nd position in best paper category-student, JAGURTI-2023 organized by NM Institute of Engineering

and Technology (NMIET) Paratpara, Bhubaneswar, Odisha 751019 held from 5th - 6th January 2023.

4. Gayatri Dash participated and secured 3rd Position in Solo dance, GAJAJYOTI 2K23 organized by Krupajal Engineering College(KEC), Prasanti Vihar, Kausalyapur, Bhailo, Odisha 752104 held on 27th febuary 2024.

5. Amarendra Ojha participated and secured 3rd Position in Extemper, SPECTRUM-2023 (Cultural), organized by Spintronic Technology & Advance Research (STAR), Jatni, Bhubaneswar, Odisha 752050, held from 7th -8th March 2023.

6. Debasis Dash and Priyanshu Chowdhury participated and secured 3rd Position in Movie Making Rein4z 2023, Techno-Cultural Fest, organized by Modern Institute of Technology & Management (MITM), Bhubaneswar, Odisha 752054 held from 28th – 29th March 2023.

7. Alok Choudhury participated and secured 2nd Position in 29 Odisha State Powerlifting Championship, organized by Odisha Powerlifting association, held from 23th – 25th September 2022.