TECHNICAL CELL DETAILS

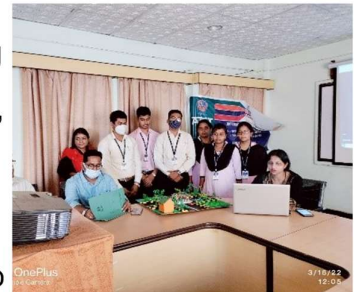## CENTER FOR APPLIED RESEARCH (CAR)

There are seven centres for Advance Research at ABIT. These are…

- AUTOMATION & ROBOTICS
- COMPOSITE & NANO MATERIALS
- DATA SCIENCE & ARTIFICIAL INTELLIGENCE
- DESIGN & PROTOTYPE DEVELOPMENT
- ENERGY EFFICIENCY & SUSTAINABILITY
- MARKETING & SOCIAL RESEARCH
- STANDARD, GOVERNANCE, RISK & COMPLIANCE

CENTER FOR AUTOMATION & ROBOTICS

The centre for Automation & Robotics is established to meet the growing demand for trained engineers in the field of embedded systems, industrial automation & robotics. The applied research and engineering practice in this Center include study, design and analysis of embedded systems, robotic systems, sensor based controls & their applications to industry, environmental problems, Agriculture, Health care, Smart city, Defense and our everyday lives. The centre aims to provide students exposure to academic and applied research on industrial automation and robotics to meet the upcoming industrial needs utilizing technological advancements.

Mentors: Prof. Debakanta Behera (ENTC)   Prof. Prasanjit Nanda (ENTC)

Dr. Shubhalaxmi Mohapatra (ENTC)   Prof. P K Champati (CSE) Dr. Biswaranjan Rout (Mech)

CENTER FOR COMPOSITE & NANO MATERIALS

The center for composite and Nano-Materials undertake fundamental, applied and industrially-focused research on synthetic and bio-based composite materials, manufacturing processes, design, analysis and experimental characterization. Composite materials have wide ranging, proven applications in critical areas that provide unique characteristics to the product. For instance, only advanced composites meet the stringent requirements of rugged and lightweight demands.
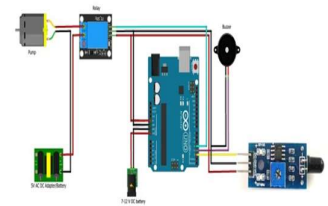
Mentors:

Dr. Manoj Kumar Praharaj (PHY), Dr. Deepak Kumar Jesthi (Mech),

Dr. Narsingh Deep (Mech), Er. Abhishek Samal (Civil)

CENTER FOR DATA SCIENCE & ARTIFICIAL INTELLIGENCE

Data Science and Artificial Intelligence centre has been established to prepare students with the skills to perform intelligent data analysis which is a key component in numerous real-world applications. This centre aims at providing not only the core technologies such as artificial intelligence, data mining and data modelling but also gives intensive inputs in areas of machine learning and big data analytics. By this course, the students in our centre will gain cross-disciplinary skills across fields such as statistics, computer science, machine learning, and logic, data scientists and may have career opportunities in healthcare, business, eCommerce, social networking companies, climatology, biotechnology, genetics, and other important areas.

Mentors: Dr. Shree Kanungo (MBA) Mr.   Sanata Kumar Swain (MCA)

Mrs. Chinmayee Rout (CSE)   Mrs. Rashmi Rekha Swain (MCA)

CENTER FOR DESIGN & PROTOTYPE DEVELOPMENT

This is a platform for students to apply their innovative ideas into feasible design. They will get multidisciplinary working environment to implement the ideas into working prototype. The Objective of establishing this centre is to, instill the culture of critical, creative and collaborative thinking among the students and faculties to develop sustainable design, Impart necessary design skill to transform idea into tangible/intangible outcome, Practice to put the locally available materials and components into different prototypes. Convert promising prototypes into commercial products

Mentors: Er. Chinmay Das (Mech.),   Er. Jyotirmayee Behera (Mech.)

CENTER FOR ENERGY EFFICIENCY & SUSTAINABILITY

This is a platform for students to apply their innovative ideas for the use of sustainable energy resources in critical national and global issues. The Energy Efficiency & Sustainable Energy Management program combines management skills with an understanding of responsible energy sources use and the development of sustainable sources of energy. The program provides students with an understanding of the production and conversion of different forms of energy and their use in power optimization and sustainable energy management.

Mentors: This centre will be mentored by Industry professionals and the same will be facilitated on a continuous basis by the following faculties

Dr. Debayani Mishra(EE),   Er. Prasantini Samal (ECE)

CENTER FOR MARKETING & SOCIAL RESEARCH

The Centre for Marketing and Social Research has been formed with an aim to equip students with the means to identify social and marketing problems, conduct the necessary research in terms of a detailed survey and analysis and provide a feasible solution for the practical problem. The objectives of the Centre are

➢ To understand the nature and scope of Market Research and Social Research.

➢ To provide adequate knowledge on Conceptual Research and Applied Research.

➢ To identify and formulate Social / Marketing problems from a research perspective and provide inferences or solutions for the same.

➢ Enable students to design and implement successful Marketing strategies and programmes.

Mentors: Dr. Shree Kanungo (MBA) MrsSanjukta Mohanty (MBA)

CENTER FOR STANDARDS, GOVERNANCE, RISK & COMPLIANCE

The Center for Standards, Governance, Risk & Compliances provides application oriented learning that will help students to connect engineering concepts with real world engineering applications. It facilitates the students to understand the concepts of SDLC and aware the students about the Standards, Governance and Risk management. The Objective of the centre is to exposing the students to be aware of International standards of process, governance and industry Practices (ISO/CMMI), Practice to use of tools and technologies for software development, testing and quality management, To provide the basic knowledge of risk managements, to understand the core concept of information security and to gain practical exposure and hands on experience using tool driven Agile platform.

Mentors: Dr. Rajesh Kumar Sahoo (CSE) Dr. Chinmaya Ranjan Patanaik (CSE)