INFORMATION BROCHURE 2024-25

UMA CHARAN PATNAIK ENGINEERING SCHOOL

BERHAMPUR–760010, DIST: GANJAM (ODISHA)

(Under Govt. of Odisha, Skill Development & Technical Education Department)

Affiliated to AICTE & Admn. control of Directorate of Technical Education & Training, Odisha, Cuttack

The authorities reserve the right to make amendments to rules, schedules and regulation from time to time. The academic regulations are subjected to modifications as would be decided by State Council of Technical Education and Vocational Training, Odisha.

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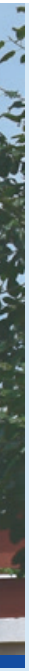
Er. Sushanta Kumar Patra
Principal
Uma Charan Patnaik Engineering School,
Berhampur-760010

About us

UMA CHARAN PATNAIK ENGINEERING SCHOOL, BERHAMPUR previously known as Berhampur Engineering School named after the Great Freedom Fighter and Eminent Parliamentarian Late Uma Charan Pattnaik was established in the year 1956.It is located in the Silk City at a distance of 3 Kms form the Railway Station and 3 Kms from the Bus stand.It is located 180Km south of state capital Bhubaneswar and 10Km from Gopalpur port.

The Industries Department, Government of Odisha took over this institution for better management from the private committee on 12th November 1958. The institution is affiliated to the State Council for Technical Education and Vocational Training (SCTE&VT) Odisha & AICTE New Delhi, is under the Administrative Control of Director of Technical Education and Training, Odisha, Cuttack which comes under the Skill Development & Technical Education Department, Government of Odisha.



UCPES offers three-year diploma programs across diverse engineering disciplines, ensuring students gain a solid foundation in both theory and practice. The institute fosters innovation, creativity, and practical problem-solving skills, producing industry-ready professionals.

Over the decades, UCPES has transformed into a hub of innovation, cultivating a spirit of excellence among its students. The alumni of this institution have made remarkable contributions across industries, academia, and research, bringing laurels to the state and the nation.

With its strong foundation, historical significance, and unwavering commitment to education, UCPES remains a symbol of academic distinction and a source of pride for Odisha. The institute continues to inspire and shape the leaders and innovators of tomorrow.

VISION:

To be a leading technical institute that provides excellent education to create human resources of high standard for the society and industry.

MISSION:

1. To develop state of the art facilities for technical education.
2. To create a well experienced faculty that under stands need of the society and industry.
3. To provide resources that make faculty and students keep abreast of industry.

CORE VALUES:

Discipline

Team Work

Empathy

Transparency

Social Awareness

PROGRAMME OUTCOMES (Pos) of Diplomain Engineering

P01: Basic and discipline specific knowledge:

Apply knowledge of basic mathematics, science, engineering fundamentals and engineering specialization to solve the engineering problems.

P02: Problem Analysis:

Identify and analyze well-defined engineering problems using codified standard methods.

P03: Design/development of solutions:

Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

P04: Engineering tools, experimentation and testing:

Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

P05:Engineering practices for society, sustainability and environment:

Apply appropriate technology in context of society, sustainability, environment and ethical practices.

P06:Project management:

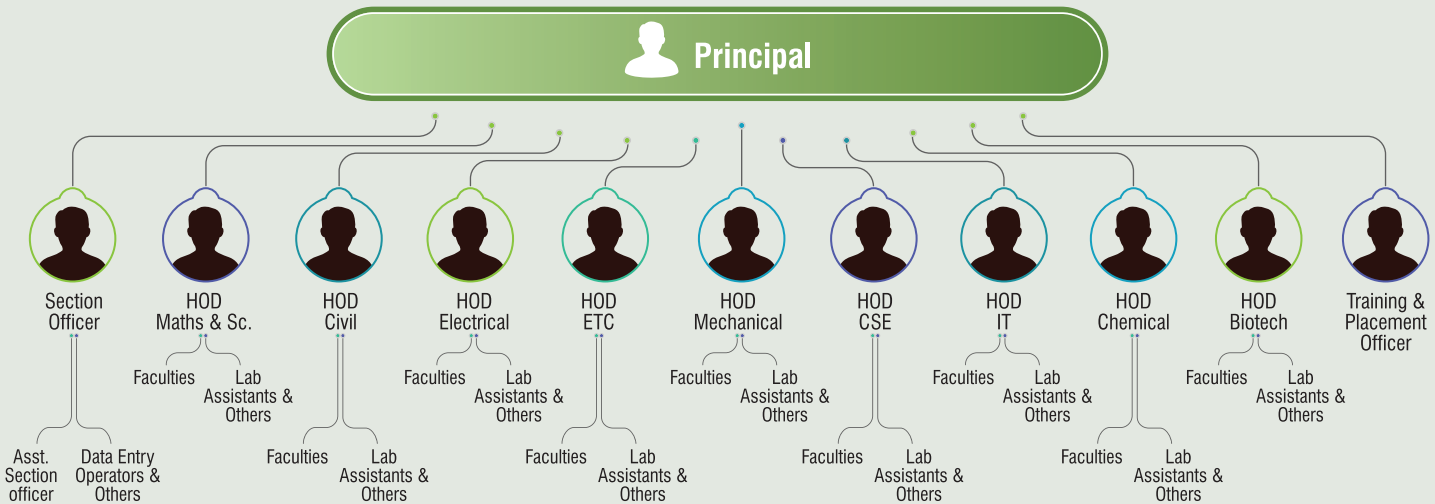
Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

P07:Life-long learning:

Ability to analyze individual needs and engage in updating in the context of technological changes.

UMA CHARAN PATNAIK ENGINEERING SCHOOL

INSTITUTE ADMINISTRATION



OUR INTAKE

1.	CIVIL	60
2.	ELECTRICAL	60
3.	ET&C	60
4.	MECHANICAL	60
5.	COMPUTER SCIENCE	60
6.	INFORMATION TECHNOLOGY	20
7.	CHEMICAL	40
8.	BIOTECHNOLOGY	30
	TOTAL	**390**

MEMBERS OF GOVERNING BODY

1. District Collector, Ganjam Chhatrapur
2. Local MLA
3. DTET Odisha, Cuttack
4. VC SCTEVT Odisha, Bhubaneswar
5. Principal UCPES, Berhampur (Member Secretary)
6. Senior Faculty UCPES
7. Executive Engineer Ganjam R & B Division, Berhampur
8. Executive Engineer Ganjam P.H Division, Berhampur
9. Executive Engineer SOUTHCO, Berhampur
10. Regional Asst. Director of Employment (South Zone) Berhampur
11. Director NTTF, Gopalpur
12. Head of HR Ganjam Industry Aditya Birla Chemical

CONTENTS

DEPT. OF MATHEMATICS AND SCIENCE

The Department of Mathematics and Science was founded in 1956. It has three basic sciences: Mathematics, Physics and Chemistry. The Department of Mathematics and Science Facilitate and collaborate between math, science, and engineering disciplines to tackle complex problems. Apart from physics and chemistry laboratory there is a communicative language laboratory in this department which plays key role in developing skills and attitude of students necessary to excel in their chosen fields.

VISION

We aim to empower students to think critically, analyze problems, and develop innovative solutions, make meaningful contributions to society, and adapt to an ever-evolving technological landscape.

MISSION

Understand the connections within mathematics, physics and chemistry as well as application of mathematics, physics and chemistry to other engineering disciplines also to develop connections to professional communities.

STAFF POSITION:

1. Miss Dipti Laxmi Bhuyan, Sr. Lecturer, Hod I/C
2. Sri Shishir Kumar Naik Lecturer, Mathematics
3. Miss Manaswinee Patnaik Lecturer, Physics
4. Sri Janmejay Mahallik, Lab. Assisstant
5. Miss Priyanka Das, Lab. Assisstant
6. Sri G. B. Reddy, Guest Faculty, English
7. Mrs. Sanjukta Das, Guest Faculty, English
8. Miss G. Susmita, Guest Faculty, Physics
9. Sri Shankar Kumar Pradhan, Guest Faculty, Mathematics
10. Miss Rasmi Prabha Sahu, Guest Faculty, Chemistry

PHYSICS LABORATORY

Physics laboratory plays a vital role in helping students learn and understand physics concepts. Experiments help students visualize and understand complex physics theories. Students see the relevance of physics to everyday life, technology, and engineering.

CHEMISTRY LABORATORY

The experiments conducted in chemistry laboratory help students visualize and understand complex chemistry concepts. Students gain practical experience by conducting experiments, which reinforces theoretical concepts.

DEPT. OF CIVIL ENGINEERING

Civil Engineering department is the oldest branch of our institution. The department has been running its diploma program since its inception in 1956. It is dedicated to shaping future engineers equipped with the skills to design, construct, and maintain infrastructure that supports modern society. With a strong focus on sustainability, innovation, and hands-on learning, the department offers state-of-the-art laboratories, experienced faculty, and collaborative research opportunities.

VISION

To be a global leader in engineering education to inspire and educate the next generation of civil engineers to be visionary problem solvers, equipped with the skills, knowledge, and ethical values to address the world's complex and evolving infrastructure challenges.

MISSION

- To impart quality and real time education to contribute to the field of Civil Engineering.
- To prepare competent responsible civil engineers with higher moral and ethical values who
- can adapt to changing technologies and emerging societal needs.
- To provide knowledge base and consultancy services in all areas of Civil Engineering for
- industry and societal needs.

STAFF POSITION:

1. Er. Mano Ranjan Nayak, HOD
2. Smt. Laxmipriya Mohapatra, Senior Lecturer
3. Smt. Pramila Kumari Gouda, Lecturer
4. Pradyumna Kumar Mahapatra, Lab Assistant
5. Brundaban Gomango, Lab Assistant
6. Rakesh Kumar Panda, Guest Faculty
7. Dharitri Lenka, Guest Faculty

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Preparation

To prepare students to succeed in employment/profession and/or to pursue under graduate educations in civil Engineering discipline in particular and allied Engineering discipline in general.

PEO2: Core Competence

To provide students with a solid foundation in mathematical, scientific and engineering fundamentals required to formulate, analyze and solve engineering problems requiring knowledge of civil Engineering.

PEO3: Breadth

To prepare students with engineering breadth to innovate, design, and develop products and to contribute in providing solutions related to multidisciplinary real-life problems.

PEO4: Professionalism

To inculcate in students professional and ethical attitude, effective communication skills and team work to become a successful professional.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1:

Will be able to design and build civil engineering-based systems in the context of environmental, economical, and social requirements and serve the community as ethical and responsible professionals.

PSO2:

Will be Able to use knowledge in various domains to identify research gaps and hence to provide solution to new ideas and innovations and engage in lifelong learning for professional growth.

MATERIAL TESTING LABORATORY

The Material Testing Laboratory is a cornerstone of practical learning and research in the Civil Engineering Department. It is equipped with advanced instruments and tools to evaluate the properties and behavior of construction materials such as concrete, steel, aggregates, bricks, and asphalt. Students conduct experiments to assess material strength, durability, elasticity, and other critical parameters, ensuring they meet quality and safety standards.

FLUID MECHANICS LABORATORY

This lab is equipped with modern instruments and setups for experiments related to fluid flow, pressure measurement, energy losses, and hydraulic machinery. Key experiments include studying Bernoulli's theorem, measuring flow rates using devices like venture meters and orifice meters.

SOIL MECHANICS LABORATORY

This lab is equipped with advanced instruments for experiments such as grain size analysis, Atterberg limits, compaction tests, shear strength tests, and permeability studies. These experiments help students and researchers evaluate soil stability, bearing capacity, and suitability for various construction projects.

TRANSPORTATION LABORATORY

It is equipped with advanced tools and testing equipment, the lab enables the study of pavement materials include bitumen and aggregate testing, mix design for asphalt pavements.

CAD LABORATORY

It is equipped with advanced software and tools to support the design, analysis, and modeling needs of civil engineering projects. It provides students with hands-on training in using modern CAD tools like AutoCAD, STAAD Pro and Revit to create detailed structural designs, and develop project blueprints. The lab fosters innovation, enhances technical skills, and bridges the gap between theoretical concepts and practical application in areas such as structural engineering, geotechnical analysis, and urban planning.

DEPT. OF ELECTRICAL ENGINEERING

Welcome to department of Electrical Engineering, UCPES, Berhampur. The esteemed department of electrical engineering has been playing a pioneering role in producing certified engineers of highest Caliber ever since it was established in the year 1957. With the strength of inspiring & distinguished faculties the department offers 60 seats to produce future nation builders in a single academic year. It has state of the art infrastructure & laboratory facility with recurring up gradation to keep pace with the changing technologies. Students are highly encouraged to get engaged with challenging projects. The industry centric pedagogies include summer training, industrial visit, seminars and projects to match with contemporary technology. With supportive infrastructure like modern laboratories & smart classrooms, contemporary pedagogies, the department also supports students' innovative entrepreneurial skills. For further growth and supplement the academic infrastructure, a Memorandum of Understanding (MoU) has been signed with Schneider Electric India.

VISION

To develop competent electrical engineers having a spirit of inquisitive questioning and ability to excel in the pressure of fast changing professional world in an environment that fosters strong ethical values, teamwork and environmental consciousness.

MISSION

- To create students possessing sound fundamental knowledge of Electrical Engineering.
- To strive for continuous improvement in the quality of academics and inculcate professional ethical values among the students and faculty members.
- To encourage and support creative abilities and innovative temperament.
- To develop students' skill and knowledge to enhance the employability.

STAFF POSITION:

1. Er S S Sahu,HOD I/C & Sr. Lecturer
2. Er Swarnaprabha panigrahi, Lecturer
3. Ashirbad Behera,Guest Faculty
4. Dharitree Behera, Guest Faculty
5. Parsuram Das, Lab Assistant

PROGRAM EDUCATIONAL OBJECTIVES(PEOs)

PEO1: To develop capability to understand the fundamentals of science and Electrical Engineering for analyzing the engineering problems with futuristic approach.

PEO2: To inculcate an attitude for identifying and undertaking developmental work both in industry as well as in academic environment with emphasis on continuous learning enabling to excel in competitive examinations at global level.

PEO3: To provide socially responsible, environment friendly solutions to electrical engineering related broad- based problems adapting professional ethics.

PEO4: To nurture and nourish effective communication and interpersonal skill to work in a team with a sense of ethics and moral responsibility of achieving a goal.

PROGRAM SPECIFIC OUTCOMEs(PSOs)

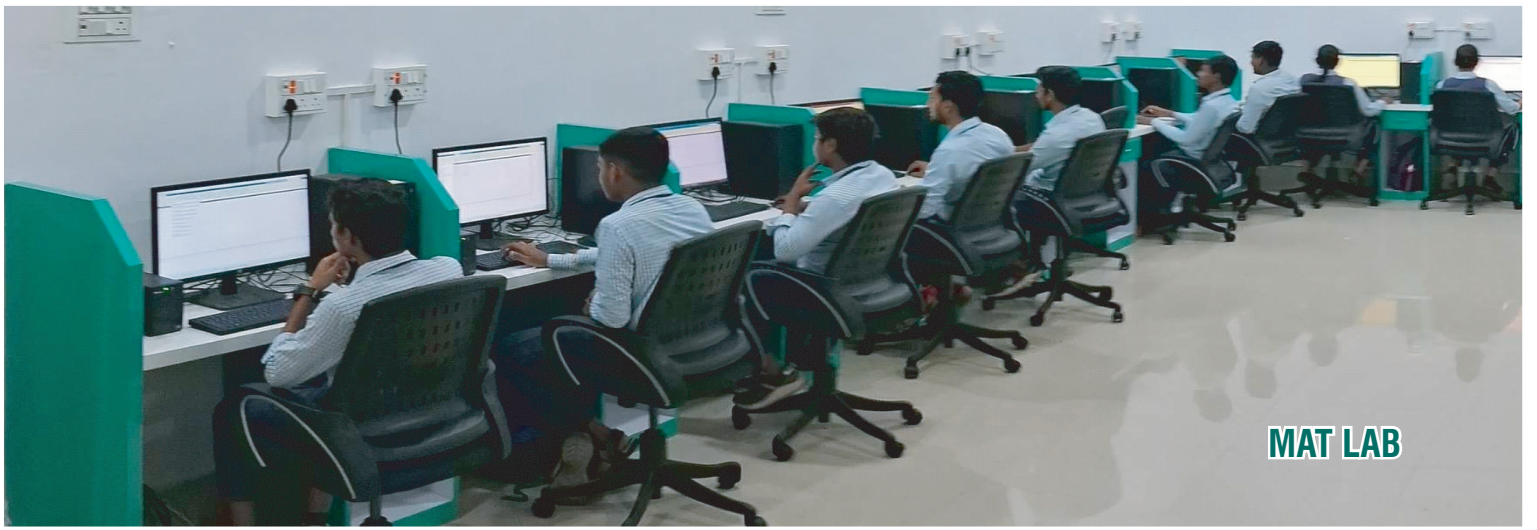
PSO1: Apply the fundamentals of mathematics, science and engineering knowledge to identify, formulate, design and investigate complex engineering problems of electric circuits, analog and digital electronics circuits, control systems, electrical machines and Power system

PSO2: Apply the appropriate techniques and modern engineering hardware and software tools in electrical engineering to engage in lifelong learning and to successfully adapt in multi-disciplinary environments.

PSO3: Aware of the impact of professional engineering solutions in societal, environmental context, professional ethics and be able to communicate effectively.

ELECTRICAL MACHINE LAB

INDUSTRIAL AUTOMATION LAB



DEPT. OF ELECTRONICS AND TELECOMMUNICATION

The Department of Electronics and Telecommunication (ETC) Engineering, established in 1970, boasts a rich legacy of academic excellence and professional success. Over the decades, it has produced numerous skilled professionals, many of whom hold prestigious positions in reputed organizations worldwide. The department offers a 3-year Diploma course in Electronics and Telecommunication Engineering, with an annual intake of 60 students. It provides a comprehensive curriculum that combines theoretical knowledge with practical skills to prepare students for the dynamic field of electronics and telecommunication.

VISION

To be a premier institute that produces skilled and ethical Electronics and Telecom Engineers who can meet the needs of current technological advancements and can adapt to the accelerating changes.

MISSION

- To offer quality education through innovative teaching methods and practical orientations to prepare the students for a real-time design and development so as to pursue a successful career.
- To produce diploma graduates with technical expertise, professional attitude and ethical values.
- To provide the best learning environment to the students, faculty and staff members conducive to create excellence in technical education.

STAFF POSITION:

1. Prakash Chandra Sethi, Sr. Lecturer & Hod I/C
2. Deepika Panda, Lecturer
3. Gopal Chandra Behera, Lecturer
4. Poonam Panda, Guest Faculty
5. Sagar Sahu, Guest Faculty
6. Pramod Kumar Patra, Sr. Instructor
7. Narayan Sahu, Lab Assistant

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Diploma Graduates will demonstrate technical proficiency and apply engineering knowledge to solve real-world problems in the field of Electronics and Telecommunications

PEO2: Pursue higher education, engage in lifelong learning, and adapt to rapidly changing technologies in engineering and related fields.

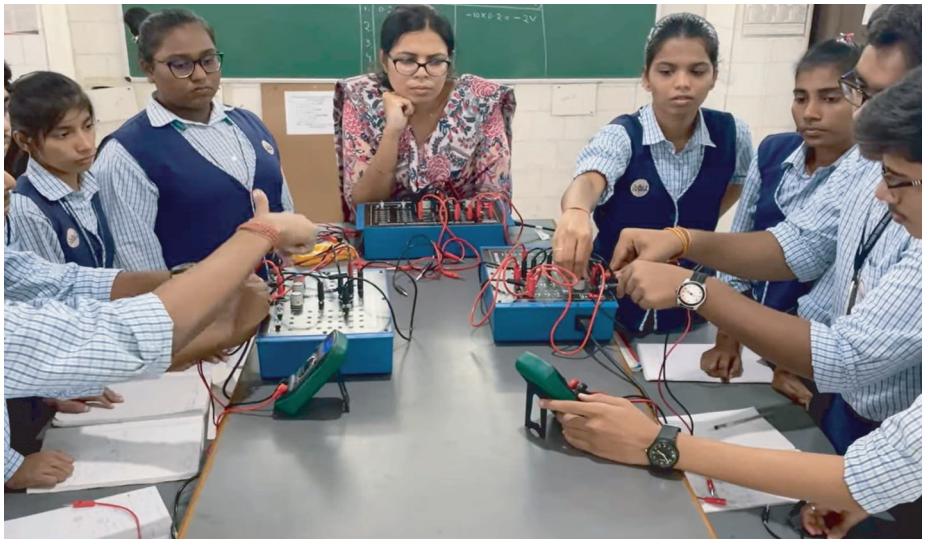
PEO3: Exhibit effective communication, teamwork, leadership, and ethical responsibility in their professional careers.

PEO4: Contribute to society by addressing environmental, social, and economic challenges through innovative solutions and practices.

PROGRAM SPECIFIC OUTCOMEs(PSOs)

PSO1: Able to demonstrate the technical competency in the design and analysis of Electronics and Telecommunication systems using various software and hardware tools.

PSO2: Able to identify real-time problems and provide energy and cost efficient solutions using the knowledge of basic science, mathematics and Electronics and Telecommunication Engineering.



Digital Electronics / Microprocessor & Microcontroller Lab:

Focuses on foundational and advanced concepts in digital circuits, microprocessors, and microcontrollers, enabling students to develop skills in hardware programming, interfacing, and system design.

Circuit Theory / Analog Electronics Lab:

Provides practical exposure to circuit analysis, design, and testing of analog circuits, helping students understand the principles of resistors, capacitors, transistors, and operational amplifiers.

Analog / Digital / Advanced Communication Lab:

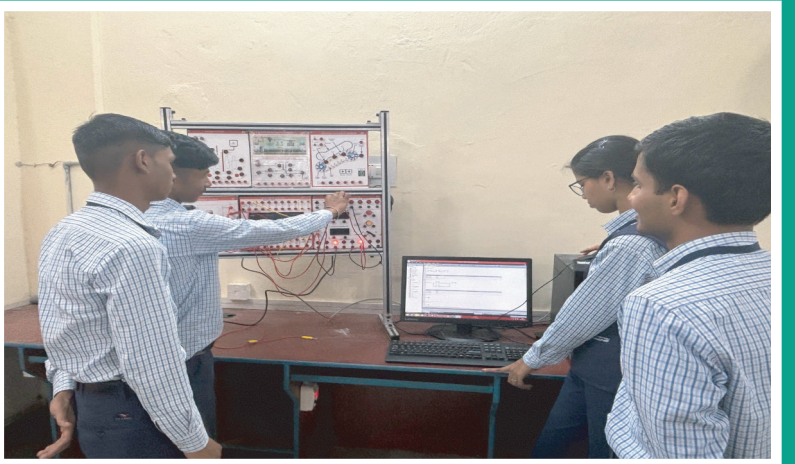
Equips students with knowledge of communication systems, covering topics like modulation, demodulation, digital communication techniques, and advanced technologies such as fiber optics and satellite communication.

Simulation / Networking Lab:

Introduces students to simulation tools for circuit and system design, alongside networking principles, offering hands-on experience in computer-aided design and network configuration.

PLC Lab:

Provides a platform to learn about Programmable Logic Controllers (PLC), automation, and industrial control systems, allowing students to design, program, and troubleshoot automated processes.



DEPT. OF MECHANICAL ENGINEERING

Department of mechanical engineering came into existence in the year 1956 with intake capacity of 60. Since then, the department has focused in the development of academic excellence of student. The curriculum is so designed that it covers the recent trends in technology.

VISION

To produce human resources of high standard in mechanical engineering who can contribute favorably to the technological and socioeconomic development of the nation.

MISSION

- Develop state of the art facilities related to mechanical engineering.
- Make the students competitive for employment or higher studies in highly esteemed organizations/institutions.
- Encourage to solve problems of society implementing technical knowledge

STAFF POSITION:

1. Ghanashyam Sarangi, H.O. D
2. Debashish Bisi, Sr. Lecturer
3. Rama Krishna Sahu, Lecturer Stage-II
4. Hadu Bandhu Dakua, Lecturer Stage-I
5. Satya Narayan Tripathy, Guest Lecturer
6. Susant Kumar Tripathi, Guest Lecturer
7. Maheswar Jena, Lab Assistant
8. Pradeep Kumar Sahu, Guest Lab Assistant
9. Sonali Sahu, Guest Lab Assistant
10. Subhrajeet Mohanty, Guest Lab Assistant

PROGRAM EDUCATIONAL OBJECTIVES(PEOs)

PEO1: To obtain fundamental and advanced knowledge in the field of mechanical engineering.

PEO2: To get employed in public/private sector organizations.

PEO3: To opt for higher studies in order to excel more to pursue a career of choice or for more employment benefits and advanced opportunities.

PROGRAM SPECIFIC OUTCOMEs(PSOs)

PEO1: Develop supervisory skills to work effectively in a team by following ethical and environmental practices.

PSO2: Identify, analyze and solve engineering problems relevant to mechanical engineering and allied engineering streams.

WORKSHOP (WELDING SECTION)

WORKSHOP (TURNING SECTION).

LIST OF LABs

1. Engineering Mechanics Lab
2. Thermal engineering Lab
3. Material testing Lab
4. Hydraulics and Fluid Mechanics lab
5. CNC Lab
6. Workshop (Fitting, Carpentry, Welding, Turing, Machine shop)

DEPT. OF COMPUTER SCIENCE

Computer Science is the study of computer hardware and software. A diploma in Computer Science and Engineering passed out student can work as Hardware Engineer, Software Programmer, Web designer, Database Administrator, Network Administrator and Data Analyst. He/ She can achieve knowledge to apply Cryptography, Internet of Things and Artificial Intelligence. Uma Charan Patnaik Engineering School, Berhampur is offering three year diploma in Computer Science and Engineering with student intake capacity of 60. Department of Computer Science and Engineering was established in the year of 1992.The curriculum is designed to be rigorous and is regularly updated to include the latest trends and technologies in the field. Focus of this course is thorough understanding of Database, Object Oriented Concept and Web design technologies. It also imparts latest technologies like Cryptography, internet of Things, data Science and Artificial Intelligence.

VISION

The vision of the Department is to become a leader in imparting education of high quality in Computer Science and Engineering to produce human resources suitable for industry and society.

STAFF POSITION:

1 Mr. Abhiram Behera, Sr. Lecturer cum HOD

2 Smt Nayana Patel, Guest Faculty

3 Smt Jhilli Sethi, Guest Faculty

4 Ms. Barsha Subudhi Ray, Guest Faculty

5 Smt Sarada Sahu, Guest Faculty

6 Manoranjan Nayak, Lab Asst Computer Science

MISSION

- Encourage faculties to be skilled as per need of the society and industry.
- Create computing environment that allow students to solve problems of society applying technical knowledge.
- Provide core and latest technology to enable students fit for the industries

PROGRAM EDUCATIONAL OBJECTIVES(PEOs)

PEO1:

To provide core technology in field of Computer Science and Engineering that makes students competent for higher study.

PEO2:

To train the students in latest technologies that give them employed in highly esteemed organization/industry.

PEO3:

To impart basic life skill and team work in project development which will drive them in future to achieve the leadership quality and managerial skill.

PROGRAM SPECIFIC OUTCOMEs(PSOs)

PSO1:

Acquire adequate knowledge upon analysis of specific social problem and providing hardware and software solution by applying skills in database, object oriented concept, web design technologies, data science, internet of things and artificial intelligence.

PSO2:

Develop soft skill by following ethical and environmental practice.

COMPUTER APPLICATION LABORATORY CUM SMART CLASSROOM

Students learn various computer languages like C, Java, Python, HTML, MS Office and various operating systems like Unix, Windows etc.

IOT AND HARDWARE MAINTENANCE LABORATORY

Students learn various skills related to the maintenance of computer hardware and IOT technology.

DEPT. OF INFORMATION TECHNOLOGY

The Department of Information Technology (IT) at the Uma Charan Patnaik Engineering School, Brahmapur was established in the year of 2001. The Department offers Three years Diploma course in Information Technology. The course curriculum is designed to be rigorous and is regularly updated to include the latest trends and technologies in the field. The student intake capacity of IT branch is 30. The students are taught various concepts related to Operating Systems,Computer System Architecture, Database, Object Oriented Concept and Web design technologies along with latest technologies like Cryptography, internet of Things, Data Science and Artificial Intelligence.

VISION

The vision of the Department is to impart high quality education to the students for producing highly proficient software professionals, academicians and entrepreneurs with sound ethics, latest knowledge, and innovative ideas in the field of Information Technology to meet industrial needs and social expectations.

MISSION

- The mission of the department is to provide high-quality education incorporating the newest technology that prepares the students to be successful in their professional practice and advanced studies.
- Provide opportunities to promote excellence in teaching through faculty development training program as per the current requirement of the industry and society.
- To provide all the required resources and infrastructure to be used for performing practical classes as per the recent technologies so that the students can solve the Information Technology related social problems.

STAFF POSITION:

1. Mr. Abhiram Behrea, Sr. Lect
2. Mrs Reetanjali Panda, Lecturer
3. Mrs Sumitra Mahapatra, Guest Faculty
4. Mr Binod Kumar Sabat, Guest Faculty
5. Mr Birendra Nath Das, Guest Lab Asst

PROGRAM EDUCATIONAL OBJECTIVES(PEOs)

PEO1: To provide the fundamental knowledge in Information Technology concepts for the development of computing systems

PEO2: To apply current industry accepted emerging technologies for designing computer based solutions for the social problems that will help the students to be placed in various positions of various famous companies or government and/or pursue Higher study and to make substantial contributions to the society.

PEO3: To produce efficient team leaders by incorporating the ability to use knowledge of ethical and management principles required to work in a team as well as to lead a team for solving problems.

PROGRAM SPECIFIC OUTCOMEs(PSOs)

PSO1: The ability to understand, analyze and develop computing systems to solve computer related social problems. The ability to gain knowledge in latest technology of Information Technology and apply the knowledge to be successful in career in industry, entrepreneurship and/or higher studies and to make substantial contributions to the society.

PSO2: The ability to use knowledge of ethical and management principles required to work in a team as well as to lead a team for solving problems.

SOFTWARE DEVELOPMENT AND WEB DESIGNING LABORATORY:

Students use various front end and back end tools like PHP, Javascript, HTML, Mysql etc to design and develop various s ware related projects that can be used to tackle social real world problems.

SOFTWARE DEVELOPMENT AND WEB DESIGNING LABORATORY

Students use various front end and back end tools like PHP, Javascript, HTML, Mysql etc to design and develop various software related projects that can be used to tackle social real world problems.

DEPT. OF CHEMICAL ENGINEERING

Chemical department was introduced in U C P Engineering School, Berhampur in the year 1992. The department is equipped with 07 modern laboratories with latest equipments. Being an old and reputed department, with strong alumni network, it provides one of the best placements for students pursuing diploma in chemical engineering. Chemical Engineering plays a key role in industries such as petrochemicals, pharmaceuticals, food processing, environmental management, energy production and a lot more.

VISION

To expertise in engineering education by inculcating an interdisciplinary approach and embracing sustainability to cultivate young minds in the field of chemical engineering to meet future industry demands.

MISSION

- To impart fundamental knowledge of engineering and its practical application by developing facilities for the department of Chemical Engineering.
- To provide the best technical learning environment for the completion of chemical engineering curriculum by adopting student centric learning methods
- To provide an environment in which both faculty and students can think critically and assimilate knowledge.
- To Encourage the students to involve themselves in continuous learning, to build skills beyond the curriculum.

STAFF POSITION:

1. Satya Sankar Raj, HOD
2. Yayati Kishore Mohanta, Lecturer
3. Siddhibinayak Pradhan, Lecturer
4. Gyan Prabhat Sikka, Lab Asst.
5. Sibasish Mahapatra, Guest Faculty

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1 : Competent and Valued Professional: To train students with good scientific and practical engineering application skills to comprehend, analyze, design, create novel engineering products and become a competent, creative and valued professional in the chosen field.

PEO2: Innovation and Technology Upgradation: To Promote innovative ideas and technology upgradation of skills essential for multidisciplinary functioning.

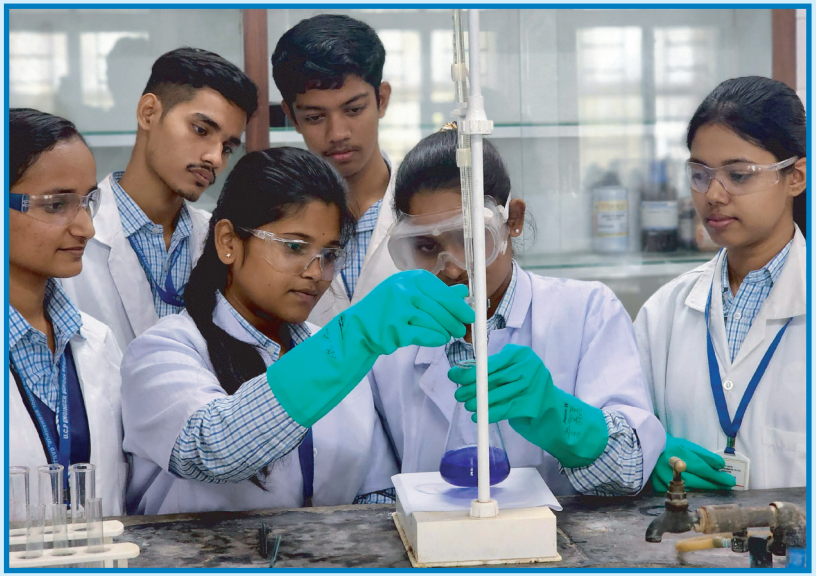
PEO3: Continuous Development: To strive for continuous professional development through continuing education and personal development based on their awareness of library resources, professional societies, seminars, workshops, expert talks and industry interactions.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1 : Essentials of Chemical Engineering: Correlate theoretical concepts with real time experimental and field data through industrial application and analytical techniques.

PSO2: Chemical Product Development: Develop cutting edge chemical equipment and products for the benefit of the human kind using innovative idea and development of skills.

PSO3: Safety Measure & Hazard Analysis: Control and analyze chemical processes considering the safety measures the hazards associated with these processes.



CHEMISTRY LABORATORY

The chemistry laboratory at our institution is designed to enhance the practical learning experience for students pursuing a diploma in chemical engineering. Fully equipped with advanced instruments and a wide array of chemicals, the lab allows students to bridge the gap between theory and practice through hands-on experimentation. Students engage in a variety of experiments in organic, inorganic and physical chemistry, as well as specialized areas such as chemical analysis. Guided by experienced faculties, students learn to apply safety protocols, operate sophisticated lab equipments and interpret experimental data. The lab provides a strong foundation in essential chemical engineering principles, preparing students for successful careers in industry and further academic advancements.

FLUID MECHANICS LABORATORY

The Fluid Mechanics Laboratory at our Chemical Engineering Institute provides students with invaluable hands-on experience in understanding the principles of fluid behavior and flow dynamics. This lab is designed to help students explore the fundamental concepts of fluid mechanics, which are essential in a wide range of applications in chemical engineering, from process design to equipment operation.This lab enables students to study fluid properties, flow measurement techniques, and the behavior of fluids in various systems. Experiments in the lab cover key areas such as laminar and turbulent flow, fluid statics, pipe flow, pressure measurement, and flow visualization.

DEPARTMENT OF BIOTECHNOLOGY

The Biotechnology department was established in the year 2006 at Uma Charan Patnaik Engineering School, Berhampur as the only institution in the state of Odisha and in India with three-year Diploma course in Biotechnology with an intake capacity 30. Biotechnology is a multi disciplinary field at the intersection of biology, technology, and engineering, dedicated to harnessing the potential of living organisms and biological systems for innovative applications. The biotechnology branch focuses on the study and manipulation of genes, cells, and bimolecular to create sustainable solutions and groundbreaking products. It empowers students with the knowledge and skills to explore diverse areas such as genetic engineering, molecular biology, bio pharmaceuticals, bio informatics, and bioprocess engineering.

MISSION

To develop globally competent biotechnology engineers committed to innovation, ethical practices, and sustainable development.

VISION

- To provide students with comprehensive knowledge and practical skills in biotechnology through quality education and hands-on training.
- To foster a culture of research, innovation, and lifelong learning.
- To instill ethical values and social responsibility in students.

STAFF POSITION:

1. Swetangini Naik, Lecturer (stage - II),HOD I/C
2. Sunil Biswajit Maharana, Guest Faculty
3. Rutuparna, Guest Faculty
4. Rakesh Kumar Guin, Lab Assistant

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Competence

Diploma Graduates will acquire knowledge and practical skills in biotechnology to excel in national and international industries or academic settings.

PEO2: Innovation and Research:

Diploma Graduates will actively participate in innovative projects and research to address real-world challenges in biotechnology.

PEO3: Professional and Lifelong Learning:

Diploma Graduates will engage in lifelong learning to adapt to technological advancements and evolving global trends in biotechnology.

PEO4: Sustainable Solutions:

Graduates will contribute to the development of sustainable technologies and practices that support environmental and societal well-being.

PROGRAM SPECIFIC OUTCOMEs(PSOs)

PSO1: Able to apply foundational knowledge and technical skills in biotechnology to solve practical problems in areas such as healthcare, agriculture, and environmental management.

PSO2: Able to demonstrate proficiency in laboratory techniques and use of modern tools for experimentation, analysis, and bioprocessing.

TISSUE CULTURE LABORATORY

In tissue culture laboratory the students are trained with the basic skills required for isolating and culturing plant or animal cells. Students are also imparted with the knowledge and understanding the conditions required for cells to grow, divide, and differentiate.

INTRODUCTION TO BIOTECHNOLOGY LABORATORY

In IBT laboratory, the students are imparted with the basic understanding of the working knowledge of instruments and techniques employed in a Biotechnology lab. They are gathered knowledge about the uses of basic instrumentation.

CHEMISTRY LABORATORY

In chemistry laboratory ,students are trained in basic skills required to develop proficiency in using lab instruments like pH meters, spectrophotometers, calorimeters, and balance scales. Along with this the students also gain hands-on experience with essential lab techniques such as titration, chromatography, distillation, and spectrophotometer.

CENTRAL LIBRARY

The institution has a well sophisticated central E-library with a collection of 28,000 and more books for use of staff and students. These include books on Science, Engineering Technology and General interest. All user get facilities to read Books, Magazines, Newspaper, Technical Journals Subscribed in our institution. Its provided in the E-library cum reading room. it is variety of service, acts as a support and inspiration to the teaching and learning community of the technical education The UCPES Library provides information and ideas that are fundamentals to functioning successfully in today's information and knowledge based society. our library of equips students with life-long learning skills and develops the imagination enabling them to as responsible citizens.

CIRCULATION SECTION

The collection of books circulation section is responsible for issuing books to students and staff through the (e-Granthalaya) library software.

STACK ROOM

The close access where are books arranged branch-wise and subject-wise in some open rack, glass almirah and closed almirah. The borrowers can access to stack either though the system or directly subject almirah.

REFERENCEN SECTION

It is open during our working hours. The desk facility offering to students and staff with a collection of 2500 nos books, 5 nos daily news paper (Odia/English) and 8 nos technical journals and magazines.

NCC Unit at UCPES Berhampur

Under Unit-1 (Odisha) CTC Army, the NCC at UCPES Berhampur exemplifies discipline, leadership, and adventure. With a robust strength of 100 Senior Division (SD) and 50 Senior Wing (SW) cadets, the unit actively participates in a variety of prestigious camps, including ATC, CATC, IGC, IUC, YEP, and the Republic Day Camp (RDC) in New Delhi, where cadets proudly salute the President at Kartavyapath and engage with prominent leaders such as the Prime Minister, Defence Minister, and Delhi CM.The unit offers thrilling adventure activities like firing, obstacle training, trekking in high-altitude terrains, camel safaris, Army a achment camps, and precision drills, fostering physical endurance and resilience among cadets.

Opportunities for growth abound, with scholarships for outstanding cadets and pathways to state and national recognition. UCPES Berhampur has a proud history of achievements, with four cadets representing the college at RDC 2023. Akash Panda, an exemplary cadet, was awarded the Chief Minister's Award for Best Cadet in the state, adding to the unit's legacy of excellence.The NCC unit at UCPES Berhampur is more than just a pla orm for extracurricular activities-it is a transformative journey that builds leaders of tomorrow

BOYS HOSTEL

The Boys' Hostel at UCPES Berhampur offers a safe, comfortable, and engaging living environment designed to support students' academic and personal growth. Strategically located just 100 meters from the main institute, it ensures easy access to academic facilities while encouraging independence and camaraderie among its residents. The hostel accommodates up to 200 students, creating a close-knit community and fostering lifelong friendships. With affordable fees- 3000/- per annum for lodging and 2400/- per month for wholesome, nutritious meals-the hostel provides a cost-effective solution for students. Facilities include a clean mess, a study room, and a recreational area where events such as annual day celebrations and fresher welcomes are hosted. A day-night playground allows students to enjoy sports like cricket and football, even after sunset. Regular festivities, such as Diwali, New Year, and inter-hostel cricket matches, create a vibrant and inclusive atmosphere. With 24/7 security ensuring the safety of all residents, the hostel stands as more than just a place to stay-it is a hub for holistic development, fostering discipline, academic focus, and community spirit.

GIRLS HOSTEL

Alakananda Girls Hostel is a well-maintained residential facility designed exclusively for diploma girls. With a capacity to accommodate 100 students, it provides a safe, secure, and comfortable environment. The hostel offers essential amenities, including spacious rooms, clean washrooms, a dining hall, 24/7 security, and access to study spaces. Located conveniently near the campus, it ensures a supportive

ALUMNI

Our alumni network is a testament to the institute's excellence, with graduates excelling in diverse fields worldwide. The Alumni Association fosters lifelong connections, organizes events, and supports the growth of the institute and its current students.

CANTEEN

Our canteen offers a variety of delicious and hygienic food options at affordable prices. It serves as a vibrant hub where students can relax, recharge, and enjoy meals and snacks in a friendly atmosphere.

OUR ESTEEMED RECRUITERS

TRAINING AND PLACEMENT CELL

Proper planning of the Technical man power is considered to be very important for the growth of the country. Government of India has given utmost importance to the engagement of the Engineering Diploma holders in Technical establishments soon after completion of the course. In all technical institutions in the country, there are separate department of training and placement to impart meaningful training to the students and to guide them to choose right career. The following are the various activities of the Training and Placement Cell of the Institute.

UMA CHARAN PATNAIK ENGINEERING SCHOOL

BERHAMPUR–760010, DIST: GANJAM (ODISHA)

(Under Govt. of Odisha, Skill Development & Technical Eduction Department)

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