



Centurion
UNIVERSITY

*Shaping Lives...
Empowering Communities...*

SNIPPET ON

TEACHERS TRAINING PROGRAMME

Sponsored by
**Council of Higher Secondary Education (CHSE),
Govt. of Odisha, India**



ଓଡ଼ିଶା ସରକାରଙ୍କ ଦ୍ଵାରା ପରିଚାଳିତ

**Centurion University of Technology and
Management (CUTM)**

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Acknowledgement

We extend our heartfelt gratitude to everyone who contributed to completing the CHSE Teachers' Training programmes. Our sincere appreciation goes to Prof. (Dr.) Mukti Kanta Mishra, President of Centurion University of Technology and Management, for his invaluable guidance and visionary leadership, which played a pivotal role in the seamless execution of this initiative.

We are deeply grateful to Dr. Ajay Kumar Nayak, Pro-VC (Administration), Dr. Yashashwi Nayak, Dean SoAS, and faculty members from Physics, Botany, and Zoology, as well as Dr. Ronismita (Economics), Dr. Tapan Panda, and the English Department Team (SoM) for their expertise and dedicated contributions.

A special acknowledgement to Dr. Shiv Sankar Das, Mr. Abhinay Mishra, Mr. Arpit Suman Swain, and Ms. Baishakhi Tripathy, whose relentless efforts in operationalising and monitoring the training across batches ensured its smooth execution at both Bhubaneswar and Paralakhemundi.

We also extend our gratitude to Dr. Girsh Prasad Rath and Mr. Abhinay Mishra for their commitment to participant coordination, and to Dr. Durga Prasad Padhi, whose dedication in arranging accommodation at Paralakhemundi made the programme possible despite initial challenges.

Our sincere appreciation also goes to the student volunteers, administrative team, MRC team, hospitality team, accounts team, transport team, IT and MIS teams, and all other contributors who played a crucial role in supporting this initiative.

Lastly, we are thankful to Dr. Yashobanta Samal, Joint Secretary, CHSE, Odisha, for their trust in Centurion University, whose recognition of our efforts further inspires us to continue striving for excellence in education, skill development, and impactful collaborations in the future.

Executive Summary

Centurion University of Technology and Management successfully conducted seven batches of Teachers' Training programmes for the Council of Higher Secondary Education (CHSE) from 16 December 2024 to 9 February 2025. A total of 350 educators were trained across multiple disciplines, including Botany (one batch), Zoology (two batches), English (two batches), Economics (one batch), and Physics (one batch).


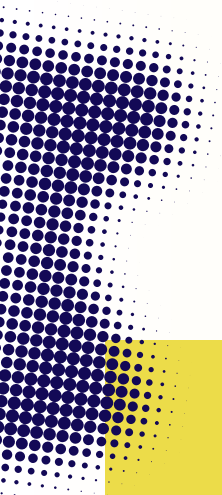
This initiative aimed to enhance the teaching competencies of educators, focusing on subject-specific advancements, innovative pedagogical methods, and practical applications to improve student engagement and learning outcomes. The training sessions were conducted across the Bhubaneswar and Paralakhemundi campuses, ensuring broad participation and accessibility.

The programme's success was made possible by the collective efforts of faculty members, administrative teams, and student volunteers, who played a crucial role in its seamless execution. The unwavering commitment and dedication of the programme coordinators ensured smooth operations, continuous support, and logistical coordination, even beyond regular working hours.

The Joint Secretary, CHSE, commended Centurion University for successfully executing the training programmes and expressed keen interest in future collaborations. This acknowledgement reinforces the institution's commitment to academic excellence, skill enhancement, and professional development in the education sector. Moving forward, Centurion University remains dedicated to fostering meaningful partnerships and delivering impactful educational initiatives.

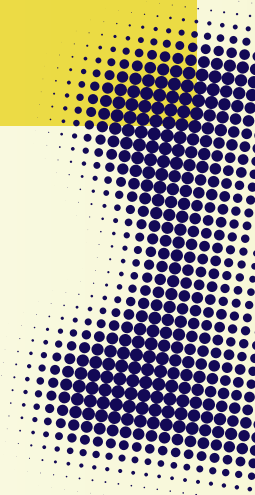
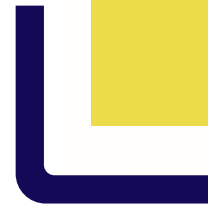
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SNIPPET ON

**TEACHERS TRAINING PROGRAMME
FOR BOTANY TEACHERS SPONSORED
BY COUNCIL OF HIGHER SECONDARY
EDUCATION (CHSE), GOVT. OF
ODISHA, INDIA**



Facilitators and Presenters

SL. NO.	NAME	POSITION	SUBJECT
1.	PROF. (DR.) MUKTI KANTA MISHRA	(PRESIDENT, CUTM)	THE JOURNEY OF CENTURION UNIVERSITY AND ITS NATURAL ECOSYSTEM
2.	DR. SAGARIKA PARIDA	PROFESSOR	ANATOMY OF ANGIOSPERM, EXTRACTION AND ANTIMICROBIAL ACTIVITY STUDY
3.	DR. JATINDRA NATH MOHANTY	PROFESSOR	GENETICS AND PLANT BREEDING, BASIC MOLECULAR TECHNIQUES
4.	DR. BHAGYESWARI BEHERA	PROFESSOR	CELL BIOLOGY AND PLANT PHYSIOLOGY, BASIC MOLECULAR TECHNIQUES, METHODS OF IDENTIFICATION OF PLANTS AND HERBARIUM PREPARATIONS
5.	DR. ASHIRBAD MOHAPATRA	PROFESSOR	FUNGAL INFECTIONS IN ROOTS AND TUBERS
6.	DR. K.B. SATAPATHY	PROFESSOR	DIVERSITY OF LIFE, METHODS OF IDENTIFICATION OF PLANTS, AND HERBARIUM PREPARATIONS
7.	DR. SAGARIKA PARIDA	PROFESSOR	NEP 2020
8.	DR. MADHUSMITA BARIK	PROFESSOR	CELL BIOLOGY AND PLANT PHYSIOLOGY
9.	DR. KALPITA BHATTA	PROFESSOR	ANATOMY OF ANGIOSPERM
10.	DR. GYANRANJAN MAHALIK	PROFESSOR	ANATOMY OF ANGIOSPERM, ADVANCED SEPARATION TECHNIQUES, EXTRACTION AND ANTIMICROBIAL ACTIVITY STUDY, METHODS OF IDENTIFICATION OF PLANTS AND HERBARIUM PREPARATIONS
11.	DR. SRIMAY PRADHAN	PROFESSOR	EXTRACTION AND ANTIMICROBIAL ACTIVITY STUDY
12.	DR. RUKMINI MISHRA	PROFESSOR	BIOTECHNOLOGY AND ITS APPLICATIONS, PLANT TISSUE CULTURE TECHNIQUES
13.	MADHUSMITA BARIK	PROFESSOR	PLANT TISSUE CULTURE TECHNIQUES

Names of Attendees

SL. NO.	NAME	POSITION	SCHOOL
1	ARUNIMA NANDA	LECTURER	INDIRA GANDHI HIGHER SECONDARY SCHOOL
2	DR. APARNA DAS	LECTURER	U.N. H.S. SCHOOL OF SC. & TECH., ADASPURCUTTACK
3	GYANEDRA PANIGRAHI	LECTURER	DEVI KANDAL NITYANANDA HIGHER SECONDARY SCHOOL
4	KESHABA CHANDRA PRADHAN	LECTURER	PANCHAYAT PRAHALLAD HIGHER SECONDARY SCHOOL
5	RAKESH KUMAR MAHANTA	LECTURER	RAVENSHAW H.S.S
6	SASALIPI NAYAK	LECTURER	SALIPUR AUTONOMOUS COLLEGE
7	SUBHASHMITA PRADHAN	LECTURER	BAHUGRAM HIGHER SECONDARY SCHOOL
8	SUBHASHMITA SETHI	LECTURER	CUTTACK HIGHER SECONDARY SCHOOL
9	SURYAKANTI BEHERA	LECTURER	SUBHADRA MAHATAB HIGHER SECONDARY SCHOOL, ASURESWAR
10	ARCHANA RAI BEHERA	LECTURER	GOVT.(SSD) HSS, NUAGADA, GAJAPATI
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13	MISS SASMITA JAGAT	LECTURER	NSBHSS
14	MISS SUBHASHREE PRADHAN	LECTURER	TENTULIA SASAN DEBASTHAN HIGHER SECONDARY SCHOOL, B D PUR
15	NAYUDU MOHAN	LECTURER	TARA TARINI HSS
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17	SARMISTHA MOHANTY	LECTURER	SCIENCE HIGHER SECONDARY SCHOOL, KUKUDAKHANDI
18	SUBHAM MEHER	LECTURER	K BVM KABISURJYANAGAR
19	DR. SIBANGINI MISRA	LECTURER	SHREE JAGANNATH HIGHER SECONDARY SCHOOL
20	MISS KRISHNA RANI	LECTURER	SVM HIGHER SECONDARY SCHOOL
21	SALOMAN SAHOO	LECTURER	KUJANG HIGHER SECONDARY SCHOOL
22	ANKITA KERKETA	LECTURER	BARUNESWAR H.S. SCHOOL

23	KUNA MAJHI	LECTURER	BABA BHAIRABANANDA HIGHER SECONDARY SCHOOL, CHANDIKHOLE
24	MRS. SWAPNA SWAGATIKA JENA	LECTURER	SAHASPUR HIGHER SECONDARY SCHOOL, BALICHANDRAJAPUR
25	NIBEDITA NAYAK	LECTURER	SADHU GOURESWAR H.S. SCHOOL
26	PADMANAV BEHERA	LECTURER	KHARASROTA HIGHER SECONDARY SCHOOL
27	SUMITRA DAS	LECTURER	MHD MAHAVIDYALAYA, CHHATIA, JAIPUR
28	DUSHMANTA SABAR	LECTURER	ADIVASI HIGHER SECONDARY SCHOOL,
29	LIJARIN SENAPATI	LECTURER	GOVT.(SSD) HIGHER SECONDARY SCHOOL, RANAPATULI
30	SAUMYAKANTA SAHOO.	LECTURER	GOVERNMENT (SSD) HIGHER SECONDARY
31	SHRABANI BEHERA	LECTURER	GOVERNMENT HIGHER SECONDARY SCHOOL, PHULBANI
32	APARNA MALLICK	LECTURER	OLAVER HIGHER SECONDARY SCHOOL
33	BANASMITA PARIDA	LECTURER	TULASI WOMEN'S HIGHER SECONDARY SCHOOL
34	MAMATA BIRGANTHIA	LECTURER	SAILENDRA NARAYAN H.S SCHOOL, RAJKANIKA
35	PRAGNYA MISHRA	LECTURER	GOVT. SCIENCE HSS AYEBA
36	SUMANSI BHENGRA	LECTURER	LOKANATH HIGHER SECONDARY SCHOOL
37	ANITA SAHOO	LECTURER	GODAVARISH HIGHER SECONDARY SCHOOL
38	DR. SMARANIKA NAYAK	LECTURER	JATNI HIGHER SECONDARY SCHOOL
39	ISANI BEHERA	LECTURER	GOVT. SSD HIGHER SECONDARY SCHOOL, SUNABEDA
40	ALOK KUMAR MAHARANA	LECTURER	HIGHER SECONDARY SCHOOL BAULASAHI NAYAGARH
41	SABITA MASAL	LECTURER	BALLAIDEVI MAHIL HIGHER SCHOOL
42	DR. RASMITA SETHY	LECTURER	U.G.S. MAHAVIDYALAY SAKHIGOPAL
43	PRIYANKA TRIPATHY	LECTURER	DR. NYAPALLI COLLEGE
44	MADHUSMITA PANDA	LECTURER	EKAMRA HIGHER SECONDARY HIGH SCHOOL
45	DR. SANJIT BISWAS	LECTURER	CHRIST HIGHER SECONDARY SCHOOL
46	MENAKA NAYAK	LECTURER	N.M. HIGHER SECONDARY SCHOOL
47	BHABANI PRASAD DASH	LECTURER	PRACHI HIGHER SECONDARY SCHOOL
48	DR. PRADEEP KUMAR RATH	LECTURER	NANCHUNI HIGHER SECONDARY SCHOOL
49	JASMIN PANDA	LECTURER	RAMADEVI WOMEN'S HIGHER SECONDARY SCHOOL
50	PRANATI ROUT	LECTURER	MADHUBAN HIGHER SECONDARY SCHOOL

Introduction

The Botany Training programme, held from 16th to 20th December 2024, at Centurion University of Technology and Management, was a collaborative and intensive initiative aimed at enhancing the teaching methodologies and technical expertise of Botany educators under the Council of Higher Secondary Education (CHSE).

This five-day programme was meticulously designed to provide participants with a blend of theoretical knowledge and practical exposure to modern botanical science. By incorporating a variety of interactive sessions, hands-on training, and expert-led discussions, the programme sought to:

- Empower educators with advanced teaching techniques tailored to contemporary botany.
- Introduce participants to cutting-edge research and methodologies in botanical sciences.
- Foster a collaborative environment for exchanging ideas and best practices among educators.
- Strengthen participants' capacity to inspire and engage students with innovative approaches.

The programme highlighted the importance of staying updated with scientific advancements in the field of Botany while emphasising practical applications that resonate with real-world scenarios. It also provided a platform for educators to bridge gaps in traditional teaching methods by integrating modern technologies and methodologies into the CHSE curriculum.

This comprehensive training not only aimed to elevate the participants' knowledge but also equipped them with tools to make botany a more interactive and appealing subject for their students.

Broad Objectives

The Botany Training programme was designed with the following primary objectives:

- To empower educators with contemporary knowledge and skills in botanical sciences.
- To align teaching practices with the principles and vision of the National Education Policy (NEP) 2020, emphasising holistic and interdisciplinary learning.
- To enable effective teaching and inspire students in the field of botany.
- To provide a collaborative platform for the exchange of ideas and best practices.
- To foster innovative teaching approaches and bridge gaps between traditional and modern educational methods.

SPECIFIC OBJECTIVE AND LEARNING OUTCOME

Day 1 (16th Dec 2024)

Session 1: Introduction and Interaction with Participants

This opening session aimed to create a welcoming atmosphere and build a positive rapport between the participants and facilitators. Activities included introductions and a brief outline of the programme's structure. The facilitators encouraged participants to express their expectations and goals for the programme, fostering a sense of inclusivity. By the end of this session, participants felt comfortable and ready to engage, understanding the collaborative and interactive nature of the training.

Session 2: Training programme Details

In this session, facilitators provided an in-depth overview of the programme's framework, breaking down the objectives and content of each session. They highlighted the expected outcomes, how each session would build on the previous one, and the approach to active learning, including group discussions and hands-on activities. Participants gained a clear understanding of the programme's goals, the structure, and what was expected from them, which motivated them to participate actively.

Session 3: NEP 2020

This session focused on the National Education Policy (NEP) 2020, which was discussed in the context of botany education. Key components such as interdisciplinary learning, the importance of experiential learning, and the shift towards student-centred approaches were explored. Real-life examples were used to demonstrate how educators could align their teaching methods with NEP guidelines. Participants understood how to integrate NEP 2020 into their teaching practices, promoting a more holistic and engaging educational experience for students.

Session 4: Connecting Nature at Pollinators' Paradise

A field trip or a nature walk at Pollinators' Paradise aimed to help participants connect with the natural world, particularly ecosystems that support pollinators. They learnt about the role of pollinators in botany and ecosystems, including their significance for biodiversity and agriculture. Participants gained valuable insights into the intricate relationships between plants and pollinators and how to incorporate these ecological lessons into their teaching.



Participants Exploring the Wonders of Pollinators Paradise at Centurion University

Day 2 (17th Dec 2024)

Session 5: Diversity of Life

This session explored the vast diversity of life forms, focusing on plant species, their classification, and evolutionary relationships. Topics included taxonomy, phylogenetic trees, and the importance of plant diversity for ecosystem stability. Participants were encouraged to discuss different plant groups and their unique characteristics. Participants gained a solid understanding of plant biodiversity, its significance for the environment, and how to communicate this complexity to students.

Session 6: Fungal Infections in Roots and Tubers

In this practical session, participants studied the various fungal pathogens that affect plants, particularly those that impact root and tuber systems. They learnt to identify symptoms, understand the life cycle of fungal infections, and apply management strategies like fungicides, crop rotation, and resistant plant varieties. Participants were equipped with the knowledge to identify and manage fungal diseases in plants, ensuring better crop health and sustainability in botany.

Session 7: Methods of Identification of Plants and Herbarium Preparations

This hands-on session focused on plant identification techniques, including morphological features and diagnostic tools like keys and field guides. Participants also learnt the art of herbarium preparation, with a focus on proper pressing, drying, and labelling of plant specimens for long-term preservation. Participants gained practical experience in both identifying plant species and creating herbarium specimens, which are essential skills for botany education.

Day 3 (18th Dec 2024)

Session 8: Cell Biology and Plant Physiology

This session covered the cellular structure of plants, examining the roles of cell walls, chloroplasts, vacuoles, and other organelles in plant function. Key physiological processes like photosynthesis, respiration, and transpiration were discussed in detail. Participants took part in experiments to observe plant cell structure and processes. Participants gained a deep understanding of plant cellular functions, essential for explaining plant biology to students.



Participants at Science Lab

Session 9: Genetics and Plant Breeding

This session introduced participants to the principles of genetics, such as Mendelian inheritance, genetic mutations, and chromosome theory. They also explored how these principles are applied in plant breeding, including the development of hybrid plants, GMOs, and sustainable agricultural practices. Participants developed the ability to explain genetic traits in plants and use this knowledge for breeding purposes, enhancing agricultural productivity.

Session 10: Basic Molecular Techniques

This session introduced molecular biology techniques such as Polymerase Chain Reaction (PCR), gel electrophoresis, and DNA extraction, which are vital in modern botany research. Participants learnt how these techniques can be applied in plant genetics, biotechnology, and conservation efforts. Participants acquired the foundational knowledge of molecular techniques, opening opportunities for advanced plant science applications.

Day 4 (19th Dec 2024)

Session 11: Anatomy of Angiosperms

Participants examined the internal structure of flowering plants, focusing on tissues like xylem, phloem, and vascular bundles. They learnt about the various adaptations that enable angiosperms to thrive in different environments. Microscopic studies and dissections of plant specimens were included to illustrate these concepts. Participants gained a clear understanding of the anatomical features of angiosperms and their relevance to plant function and ecology.

Session 12: Advanced Separation Techniques

This session explored sophisticated methods for separating plant compounds, such as chromatography, centrifugation, and electrophoresis. Participants learnt how these techniques can be used to analyse plant metabolites, essential oils, and other bioactive compounds. Participants acquired expertise in laboratory techniques that enable the analysis of complex plant compounds.

Session 13: Extraction and Antimicrobial Activity Study

This practical session demonstrated how to extract bioactive compounds from plants using solvents and other methods. Participants also conducted tests for antimicrobial activity, analyzing how plant extracts could inhibit the growth of harmful microorganisms. Participants learnt to extract plant compounds and assess their potential as antimicrobial agents, which could have applications in medicine and agriculture.

Day 5 (20th Dec 2024)

Session 14: Biotechnology and Its Applications

This session provided a comprehensive overview of biotechnology and its applications in plant science. Topics included genetic engineering, gene editing (CRISPR), and the use of biotechnology in improving crop resistance, yield, and nutrition. Participants understood how biotechnology is transforming agriculture and plant science, offering new solutions to global challenges such as food security.



Session on Biotechnology by Dr. Gyanaranjan Mahallik and Dr. Jatindranath Mohanty

Session 15: Plant Tissue Culture Techniques

Participants were introduced to plant tissue culture methods, which involve growing plants from small tissue samples under controlled conditions. Techniques for clonal propagation, callus induction, and regeneration were demonstrated in the laboratory. Participants gained the skills needed to perform plant tissue culture, which is essential for plant propagation and research in botany.

Session 16: Presentation and Feedback from Participants

In this session, participants had the opportunity to present their learning from the programme, showcasing their understanding of the topics covered. They were also encouraged to provide feedback on the programme to help improve future sessions. Participants demonstrated their grasp of the material and offered constructive feedback that could enhance the programme's effectiveness.

Session 17: Valedictory Function

The programme concluded with a formal valedictory session, during which participants reflected on their experiences, shared key takeaways, and received certificates of participation. This was a celebratory occasion, marking the end of the programme. Participants left with a sense of accomplishment, ready to apply the knowledge gained to their teaching practices and research in botany.

Special Session

The Journey of Centurion University and Its Natural Ecosystem

Speaker: Prof. (Dr.) Mukti Kanta Mishra (President, CUTM)

An interactive session on the establishment of Centurion University, biodiversity within the campus, and the role of pollinators in maintaining ecological balance. Prof. (Dr.) Mukti Kanta Mishra shared his inspiring journey of founding Centurion University and its evolution into a multidisciplinary institution. He discussed the presence of diverse tree and shrub species on campus, emphasizing their ecological significance. Participants learnt about the concept of Pollinators' Paradise, an initiative to protect and promote pollinator species like bees and butterflies within the university's green ecosystem. This session provided valuable insights into integrating environmental sustainability with education and research.

Campus Tour

A campus tour to various production units at Centurion University was also conducted. This tour was designed to provide participants with insights into the university's diverse and innovative units focused on technology, sustainability, and vocational education. The session spanned from 2:30 pm to 5:00 pm and covered a range of topics such as renewable energy, sustainable practices, paramedic education, and cutting-edge technologies. The following report outlines the key highlights and learning outcomes from each session.

Tour Schedule and Learning Outcomes

2:30 pm – 2:45 pm: CDC, Transformer, Waste to Wealth, WELL

The first stop of the tour included the CDC (Career Development Centre), the Transformer unit, Waste to Wealth initiative, and WELL (Water, Energy, and Livelihood).

2:45 pm – 3:15 pm: School of Paramedics/Law

A visit to the School of Paramedics and the School of Law provided insights into the educational approaches and technologies used in these disciplines.

3:15 pm – 3:30 pm: Renewable Energy

This session focused on renewable energy solutions implemented at Centurion University, highlighting the role of solar, wind, and other renewable sources in the university's sustainability efforts.

3:30 pm – 3:45 pm: Apparel COE

The Apparel Centre of Excellence (COE) presented innovations in the textile and apparel industry. Participants were shown the latest advancements in fabric production, garment design, and manufacturing techniques. They also explored how the COE is fostering skill development in textile production and fashion design, preparing students for the competitive apparel industry.

3:45 pm – 4:00 pm: Experience Center

The Experience Center showcased different products being manufactured at the University.

4:00 pm – 4:15 pm: ASDC ITI/ITOT/Ashok Leyland/Hyundai, Yamaha

This session highlighted the collaboration between the Automotive Skills Development Council (ASDC) and various industry leaders such as Ashok Leyland, Hyundai, and Yamaha. Participants observed the advanced training programmes offered through these collaborations, covering everything from automotive mechanics to customer service. The session emphasised the importance of industry-academia partnerships in developing skilled professionals for the automotive sector.

4:15 pm – 4:30 pm: Future Nexus, AR/VR

Future Nexus, an advanced research unit, introduced participants to the future of AR/VR applications. Participants learnt about the latest trends in AR/VR technologies, including their use in virtual simulations, remote collaboration, and immersive learning. They were shown how these technologies are shaping the future of education and industry applications.

4:30 pm – 4:45 pm: EV, CNC, 3D Printing

This session introduced participants to innovations in electric vehicles (EVs), computer numerical control (CNC) machining, and 3D printing technologies.



Participants Visiting Labs at CUTM

4:45 pm – 5:00 pm: School of Maritime

The final stop was the School of Maritime, where participants learnt about the programmes and facilities related to maritime studies and shipbuilding. Participants were introduced to the cutting-edge technology used in the maritime industry, including ship design, navigation, and sustainable practices for marine resource management. The session emphasised the growing importance of maritime education in global trade and environmental conservation.



Participants Visiting the School of Maritime

Conclusion

The training programme at Centurion University has successfully provided participants with an in-depth and practical understanding of the diverse fields within botany, biotechnology, and various interdisciplinary technologies. Over the course of several days, participants were exposed to cutting-edge research, innovative practices, and hands-on applications that bridge the gap between theoretical knowledge and real-world implementation. From learning about the National Education Policy 2020 and its alignment with modern educational strategies to exploring advanced plant sciences, genetics, biotechnology, and sustainable practices, participants have gained invaluable insights into both the scientific and practical aspects of their disciplines. Additionally, the exposure to various production units, including those focused on renewable energy, paramedics, apparel design, and even AR/VR technologies, has demonstrated the breadth of knowledge and innovative spirit fostered at Centurion University.

The campus tour, especially to various production units such as the EV, CNC, 3D printing, and the School of Maritime, further broadened participants' perspectives by highlighting the importance of industry-academia collaborations and the future of emerging technologies. This training programme not only enhanced the participants' knowledge but also fostered a deeper appreciation for integrating sustainability, innovation, and hands-on learning into their respective fields. It has prepared them to apply this learning in their own academic or professional settings and make meaningful contributions to their industries.



The programme has been an enriching experience that equipped participants with both theoretical foundations and practical skills. We are confident that the insights gained from this training will inspire participants to bring positive changes to their teaching practices, research efforts, and future careers. We extend our sincere thanks to all the facilitators, industry partners, and participants for making this programme a success, and we look forward to seeing the continued application of the knowledge shared throughout this journey.



Valedictory Ceremony for Botany Teachers

ANNEXURE-I

Attendance Sheet


COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA TRAINING PROGRAMME IN BIOLOGY (BOTANY)
Registration of Participants


Date: December 16-20, 2024

Place: Seminar Hall, Aayabhata Building, Centuron University of Technology and Management (CUTM), Raaschandrapur, Jatsi, Bhubaneswar, Odisha

Sl. No.	Name	Designation	District	Name of Higher Secondary School	Phone No.	Signature of Participants
						16.12.24
1	ARPI KUMAR SAHU	LECTURER	BUDA	Pandhara Higher Secondary School, Kamsal		
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3	ANUSITA MOHANTY	LECTURER	CUTTACK	Jatsi Girls Higher Secondary School, Cuttack		
4	DR. APARNA DAS	LECTURER	CUTTACK	O.M.H.S. SCHOOL OF SC & TECH, ADARSH, CUTTACK	9938658037	Dr. Aparna Das
5	DR. KRISHNA KAWEL DAS	LECTURER	CUTTACK	Chandrasekhar College		
6	DEVANEDRA PANGRATI	LECTURER	CUTTACK	Dr. Karle Neelamrao Higher Secondary School	9855753698	Gyanendra Pangrati
7	KESHAVA CHANDRA PRADHAN	LECTURER	CUTTACK	Parthasarathi Higher Secondary School	8917809676	Keshava Ch. Pradhan
8	MUKTINADA PANDA	LECTURER	CUTTACK	Bani Higher Secondary School	87633333	Muktinada Panda
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15	MAHESWARA BHUTAN	BL. LECTURER	GAJAPATI	IBMS, CHANDIPUT		
16	MANAS RANGAN PANDIRAJY	LECTURER	GAJAPATI	HILL TOPPLE SCHOOL, MOHANA		
17	DR. SURAJ KUMAR BEHERA	LECTURER	GANAM	CITY HIGH SECONDARY SCHOOL, BERHAMPUR	7735016941	Suraj Kumar Behera
18	DR. TIKTIBRATA SAHOO	LECTURER	GANAM	Sanku Higher Secondary School, Kothanda	7085971541	Dr. Sahoo
19	GOPWATHI DASH	LECTURER	GANAM	KHYMINDI HIGHER SECONDARY SCHOOL		
20	MS. SAAMITA JAGAT	LECTURER	GANAM	MOHIDE	9725011780	Saamita Jagat
21	MS. SUBHASHREE PRADHAN	LECTURER	GANAM	HEMTELA BASAN DEBANSAN BEHERA SECONDARY SCHOOL, H.D.	8249454611	Subhasree Pradhan
22	NAVERI MERAN	LECTURER	GANAM	Tara Tara H.S.	9928352939	N. Meran
23	PARITHA SARDAR	LECTURER	GANAM	SCIENCE HIGHER SECONDARY SCHOOL, GANAM	7978435459	Paritha Sardar
24	SARASWATHI MOHANTY	PGT	GANAM	Sanku Higher secondary school, Kothanda	9398211163	Saraswati Mohanty
25	SUBHAM MEHER	LECTURER	GANAM	K. D.V.M. Kalsarajanga	9337609907	Subham Meher
26	DR. SUBANGINI MISRA	LECTURER	JAGATSINGHPUR	SHREE JAGANNATH HIGHER SECONDARY SCHOOL	9682042525	Subangini Misra
27	MS. KRISHNA RANI	LECTURER	JAGATSINGHPUR	SVM Higher Secondary School	9174912415	Krishna Rani
28	BALARAM SAHUKY	LECTURER	JAGATSINGHPUR	KIDARI HIGHER SECONDARY SCHOOL	934840830	Balaram Sahuky
29	ANRITA K PRETA	LECTURER	JAPUR	BALUNESWAR H.S. SCHOOL	968299320	Anrita K Preta

30	DEVI PREET DALAL	LECTURER	JAFER	CH. H.S. KANAKABAI MEDICAL, JAFER	876755501	Devi Preet Dalal
31	KUNIA MAHA	LECTURER	JAFER	PARA BHISHABANANDA HIGHER SECONDARY SCHOOL, CHANDRIKALGA	774659914	Kunia Mahale
32	MS. SWATHI SOKHATILKA KHA	LECTURER	JAFER	Solapur Higher secondary school, Mahadikhalga	7746243079	Swathi
33	NEHEETA NAYAK	LECTURER	JAFER	Talga (Goverment P.S. School)	9932599441	Neheeta Nayak
34	PAIDMANAV BEHERA	LECTURER	JAFER	KHARASUTIA HIGHER SECONDARY SCHOOL	9705662977	Paadmanav Behera
35	SUMITRA DAS	LECTURER	JAFER	M.S. Mahadikhalga, Chikola, JAFER	9690213220	Sumitra Das
36	DUSHMANTA SARAS	LECTURER	KHANDAMAL	ADWAI HIGHER SECONDARY SCHOOL	9937582618	Dushmanta Saras
37	LIJANU SENAPATI	POT	KHANDAMAL	GOVT. HIGHER SECONDARY SCHOOL, KHANDAMALI	8249107932	Lijanu Senapati
38	SANJAYKANTA SAHOO	POT	KHANDAMAL	GOVERNMENT HIGHER SECONDARY	6371392122	Sanjaykanta Sahoo
39	SEPHALI GURU	POT	KHANDAMAL	GOVT. HIGHER SECONDARY KHANDAMALI		
40	SHRABANI BEHERA	POT	KHANDAMAL	GOVERNMENT HIGHER SECONDARY SCHOOL, PHULBANI	8040872814, 8417580319	Shrabani Behera
41	APARNA MALLIK	LECTURER	KENDRAPARA	GLAUKA BEHERA SECONDARY SCHOOL	9827237602	Aparna Mallik
42	BANASMITA DASDA	LECTURER	KENDRAPARA	Talga Women's Higher secondary school	8114855736	Banasmita Dasda
43	MAMATA BERGANTHA	LECTURER	KENDRAPARA	Sekonda Pratapa H.S. School, Bhubanes	9672080558	Mamata Bergantha
44	PRAGNYA MEHTA	POT	KENDRAPARA	GOVT. SCIENCE HIGHWAY	968503496	Pragnya Mehta
45	SURJASINI MOHA	LECTURER	KENDRAPARA	Deshbali higher secondary school		
46	SILMASI BEHERA	LECTURER	KENDRAPARA	Lokanath High secondary school	9937461013	Silmasi Behera

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47	ANITA SAHOO	LECTURER	KHURDHA	Gulmireth Higher Secondary School	9852813139	Anita Sahoo
48	DI. SHABANNA NAYAK	LECTURER	KHURDHA	Talga Higher Secondary School	8249270101	Shabanna Nayak
49	DIANI BEHERA	POT	KORAPUT	Govt. S.S. High Secondary School, Sankhali	7873592102	Diani Behera
50	AJAY KUMAR MAHARANA	IK-LECTURER	RAYAGADA	HIGHER SECONDARY SCHOOL, PATILASATI, RAYAGADA	9438127911	Ajay Kumar Maharana
	Sakita Samal	JR. Lecturer	Cuttack	Birla Institute of Technology, Cuttack		Sakita Samal
	Dr. Basmita Selby	Lecturer	Puri	U.G. Mahavidyalaya, Sakhigopal	256320631	Dr. Basmita Selby
	Ms. Pragnya Jaiswal	Lecturer	Khurda	Dr. M. Jyoti Prakash College	8763683931	Pragnya Jaiswal
	Smt. Madhusmita Panda	Lecturer	Khurda	Ekanka Higher Secondary School	622962274	Madhusmita Panda
	Dr. Sanjit Biswas	Lecturer	Cuttack	Christ High School, Cuttack	9437435374	Sanjit Biswas
	Manika Nayak	Lecturer	Puri	N. M. H. Secondary School, Khondak	9922126503	Manika Nayak
	Anshu Prasad	Lecturer	Puri	Puri High School, Puri	9227573751	Anshu Prasad
	Dr. Pradipta Kumar Das	Lecturer	Khurda	Alakhya High School, Khurda	9746124966	Pradipta Kumar Das
	Jasmin Panda	P.T.		Punjab Women H.S. School, Medhnikan	775087344	Jasmin Panda
	Pranati Rout	Lecturer	Jajpur	Medhnikan H.S.S.	9437604152	Pranati Rout

ANNEXURE-II

Feedback Reports

Govt. (SSD) HISS, Nongain
GA7-A/PA75
26/12-2024

Experience in this
5 day Training Programme

I would like to extend my heartfelt gratitude to CHSE & the management of Centurian University to organize such a wonderful and enriching program on English Teachers' Training.

All the sessions organized & scheduled by the CHSE is worth - appreciating.

All the esteemed dignitaries have shared their valuable experiences and augment us to improve our skills and as well as our students.

Each of the programme is really superb, thought provoking and give excellent & superb experience to all the participants which will be helpful for them in every practical classroom scenario.

Thank you.

5day Experience in Teacher Training program
CUTM, BOSE

It was an amazing amazing experience in CUTM. In the training I learned many things regarding teaching and knowledge acquisition. It was a great exposure to me to take certain key elements pertaining to teaching. There are many prop or the subject expertise had come and enlighten us with respect to literature and language acquisition. It was the opportunity to understand the thinking of students psychology in the classroom. I know the way of teaching literature in structured and fun lively manner.

Coming to the hospitality of CUTM was wonderful. There was no issue regarding food and staying.

And finally I would like to thank CHSE for inviting me to attend the teacher training programme.

Thank you.
your sincerely,
Padma Date

Kuspiyal, Navindra-
Kerangpanahat Higher
Secondary School, Kerang
Kerohla

I attended the Programme on 26/11/19 and it was
three day training programme for me. During these three days
I attended the classes of many scholars and resource persons.
The training was very informative and I am taking along
a lot of experience from here. The classes of Binayakishan
Kahu, Chandrabhanu Pathnick and Sagor Sir was amazing.

However, the most amazing, most entertaining, most
vigorous session was of Mukti Mishra Sir, an amazing person.
He made the class completely active I got a lot of inspiration
from him. He is an excellent person.

Here, the guest house and accommodation was very
good. I enjoyed the food and also enjoyed the surroundings
here. Whenever you look, you find beautiful flowers/plants of
many varieties of plants. The experience is unforgettable.
All my training friends are very friendly as well.

I hope, if I have given any chance, then surely
I will visit the Centurion university once again.

Opinion on the Training Programme

First of all I admire the noble attempt of the
CBSE for conducting a training programme of
English Teachers at Centurion University of Technology
and Management for few days. The co-operation
of the employees of this university is worth praising.
The master Trainers have tried their best to
impart the knowledge and experiences they have
~~to~~ gained from the nation and abroad. I think
it will enrich our careers and personalities
but I am in doubt how it would ~~be~~ be useful
to the students learning in rural based
secondary schools where there is less than
attendance.

While attending the workshop I was very
mindful and noting down the very important
and main points. Finally I regret to say that
some participants like me were asked to join the
programme on the third day. The Council
authority in charge of arrangement may
look into it.

However the programme has been
successful and is highly commendable.

Satvirat Sir

ANNEXURE-III

SDG Reports

Name and Address - Jyoti Prakash Tandi
Phss, Chandkhata, Bhubaneswar

Topic on (SDG) - 'Life on Land'

At ~~our~~ CURM Jatani, Bhubaneswar, the focus on land aligns with global sustainable development goals (SDGs), specifically in addressing key environmental challenges such as desertification, biodiversity loss, and promoting sustainable forestry. The university, being situated in Odisha, an area that faces diverse ecological concerns, contributes to combating these issues through research, outreach, and community engagement programs.

① - Combating Desertification:
CURM Jatani actively works on projects that aim to reverse and degradation and desertification, particularly in regions vulnerable to soil erosion and loss of vegetation. The university's research and educational programs focus on sustainable land management techniques, soil conservation, and water management to ensure that land resources are used efficiently and restored.

② - Halting Biodiversity Loss:
Biodiversity is a critical concern in Odisha, home to a rich variety of flora and fauna, many of which are endangered. CURM Jatani contributes to the conservation projects, and collaborations with local wildlife organizations.

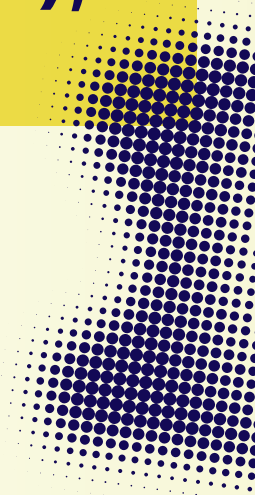
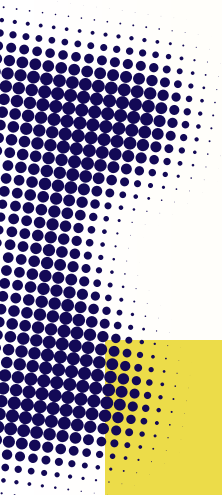
③ - Promoting Sustainable Forestry:
Sustainable forestry practices are vital for the health of ecosystems and the livelihoods of local communities. CURM Jatani works on promoting these practices through research, policy advocacy, and community-based programs.

In conclusion, CURM Jatani, through its research, education, and community engagement, contributes significantly to achieving the global goal of Life on Land by addressing desertification, protecting biodiversity, and promoting sustainable forestry practices. The university's holistic approach helps to ensure that the land, wildlife, and natural resources of the region are protected for future generations.

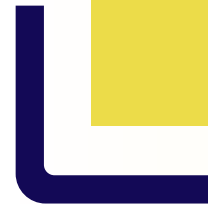

ANNEXURE-IV

Session Plan

Day	9:30AM-11:00AM	11:30AM - 1:00PM	1:00- 2:00PM	2:00-3:00PM	3:15 PM-5:00 PM
16th Dec 2024	Introduction and Interaction with the Participants (Dr. Rukmini Mishra, HoD, Dr. KB Satpathy, Emeritus Prof., Dr. Yashaswi Nayak, Dean, SoAS & Team)	Training programme Details (Dr. Rukmini Mishra)	LUNCH	NEP 2020 (Dr. Sagarika Parida)	Connecting Nature at Pollinators Paradise (All Botany Faculties)
17th Dec 2024	Diversity of Life (Dr. K.B. Satapathy)	Fungal Infections in Roots and Tubers (Dr Ashirbad Mohapatra)		Methods of identification of Plants and herbarium preparations (Dr. K.B. Satapathy, Dr Ashirbad Mohapatra, Dr. Gyanranjan Mahalik, Dr. Srimay Pradhan, Dr. Bhagyeeswari Behera)	
18th Dec 2024	Cell Biology and Plant Physiology (Dr. Bhagyeeswari Behera Dr. Madhusmita Barik)	Genetics & Plant Breeding (Dr. Jatindra Nath Mohanty)		Basic Molecular Techniques (Dr. Jatindra Nath Mohanty & Dr. Bhagyeeswari Behera)	
19th Dec 2024	Anatomy of Angiosperm (Dr. Sagarika Parida & Dr. Kalpita Bhatta)	Advanced Separation Techniques (Dr. Gyanranjan Mahalik & Dr. Srimay Pradhan)		Extraction and Antimicrobial Activity Study (Dr. Sagarika Parida, Dr. Gyanranjan Mahalik & Dr. Srimay Pradhan)	
20th Dec 2024	Biotechnology and Its Applications (Dr. Rukmini Mishra)	Plant Tissue Culture Techniques (Dr. Rukmini Mishra & Madhusmita Barik)		Presentation and Feedback of Participants (Dr. Rukmini Mishra & Team)	Valedictory Function (Dr. Yashaswi Nayak, Dean, SoAS, Dr. Rukmini Mishra, HoD, & Team)



SNIPPET ON
TEACHERS TRAINING PROGRAMME
FOR ENGLISH TEACHERS
(PHASE-01)
SPONSORED BY COUNCIL OF HIGHER
SECONDARY EDUCATION (CHSE),
GOVT. OF ODISHA, INDIA



Facilitators and Presenters

SL. NO.	NAME	POSITION	SUBJECT
1.	PROF. (DR.) MUKTI KANTA MISHRA	(PRESIDENT, CUTM)	THE JOURNEY OF CENTURION UNIVERSITY AND THE IMPORTANCE OF COMMUNICATION SKILLS
2.	DR. SASHIKANTA BARIK	PROFESSOR	GRAMMAR AND VOCABULARY STRATEGIES
3.	DR. BRAJA KISHORE SAHOO	PROFESSOR	TEACHING POETRY, PROSE, AND DRAMA
4.	DR. CHANDRABHANUPATTANA YAK	PROFESSOR	CRITICAL THINKING THROUGH LITERATURE
5.	DR. RABINDRA PRADHAN	PROFESSOR	DIGITAL TOOLS FOR ENGLISH TEACHING
6.	DR. SUBRAT SAMAL	PROFESSOR	STRATEGIES FOR TEACHING COMPREHENSION, STRATEGIES FOR TEACHING COMPREHENSION
7.	DR. TAPAN KUMAR PANDA	PROFESSOR	PRINCIPLES OF LANGUAGE ACQUISITION
8.	MS. ANKITA MOHANTY	PROFESSOR	WORD GAMES DEVELOPMENT, IMPORTANCE OF LSRW, ART OF CONDUCTING GROUP DISCUSSIONS, ROLE PLAY ON LITERARY WORKS
9.	MR. ARPIT SUMAN SWAIN	PROFESSOR	INTERACTIVE GROUP REVIEW, ART OF CONDUCTING GROUP DISCUSSIONS, TOOL-BASED LEARNING RECORD
10.	DR. PRAJNA PANI	PROFESSOR	BRIEFING OF CELTS & USE OF AI IN ENGLISH LANGUAGE TEACHING
11.	MS. SHREEJAYA SATAPATHY	PROFESSOR	SPEAKING THEIR LANGUAGE: INCLUSIVE PRACTICES FOR DIFFERENTLY ABLED LEARNERS
12.	MS. MADHUSMITA PATTNAIK	PROFESSOR	EFFECTIVE COMMUNICATION AND BUSINESS LETTER WRITING
13.	PROF. AJAYA KUMAR NAYAK	PROFESSOR	REFLECTION AND DISCUSSIONS ON NEP 2020 AND INTEGRATION OF SKILLS.

Names of Attendees

SL. NO.	NAME	POSITION	SCHOOL
1	SUSHRI ANKITA KHORA	LECTURER	LADUGAON HIGHER SECONDARY SCHOOL
2	SRI GURUBARU SENDURIA	LECTURER	GOVT WOMEN'S HIGHER SECONDARY SCHOOL, TITILAGARH
3	SIBANANDA THANAPATI	LECTURER	BEENAPANI HIGHER SECONDARY SCHOOL DHUMABHATA
4	BIKRAM TANDI	LECTURER	PS HIGHER SECONDARY SCHOOL MURIBAHAL
5	SUNITA NAYAK	LECTURER	GOVT. SSD HSS, CHUDAPALI
6	AMITABH KUMAR PUTEL	LECTURER	PANCHAYAT HIGHER SECONDARY SCHOOL, GHUNSAR
7	NIRUPAMA SAHOO	LECTURER	RADHASHYAM ANCHALIK HSS BILAISARDA
8	SRI LAXMANA MEHER	LECTURER	BOUDH PANCHAYAT HIGHER SECONDARY SCHOOL, BOUDH
9	SHESHADEV PARDIA	LECTURER	SBAHSS
10	ARPITA PATRO	LECTURER	MAHAPURUS ACHYUTANANDA HIGHER SECONDARY SCHOOL, LEMALO CUTTACK
11	LOKESWAR SUNA	LECTURER	SUBHADRA MAHATAB HIGHER SECONDARY SCHOOL, ASURESWAR
12	ASEEMA TIRKEY	LECTURER	PANCHAYAT PRAHALLAD HIGHER SECONDARY SCHOOL, NISHCHINTAKOILI
13	SWETA RATHOR	LECTURER	BRAHMANJHARILLO MAHAVIDYALAYA
14	SAMIKSHYA DAS	LECTURER	INDIRA GANDHI HIGHER SECONDARY SCHOOL
15	MR.RAJANI KANTA SAHU	LECTURER	CHOUDWAR JUNIOR COLLEGE
16	SUSHREE SANGITA PANDA	LECTURER	D.G.B.K H.S.S, KASARDA, CUTTACK
17	RENUKANTA JAGAT	LECTURER	MOHAN SUBUDHI HIGHER SECONDARY SCHOOL
18	RASMI RANJAN KHATOI	LECTURER	U.N. H.S. SCHOOL OF SC. & TECH., ADASPUR, CUTTACK
19	DR. MUNIRA SALIM	LECTURER	STEWART SCIENCE COLLEGE HIGHER SECONDARY SCHOOL
20	MS. PRACHURYA DAS	LECTURER	NIALI H.S.SCHOOL
21	MEGHAMALA SATAPATHY	LECTURER	CHRIST HIGHER SECONDARY SCHOOL
22	ASHIS KUMAR BARAL	LECTURER	JAWAHARLAL NEHRU HIGHER SECONDARY SCHOOL, KUANPAL, CUTTACK
23	ASHALATA PRADHAN	LECTURER	LAKSHESWAR WOMEN'S HIGHER SECONDARY SCHOOL
24	SAMBIT KUMAR MISHRA	LECTURER	BALLAVI DEVI MAHILA HIGHER SECONDARY SCHOOL
25	NIVEDITA MOHAPATRA	LECTURER	SHAKTI HIGHER SECONDARY SCHOOL
26	PUJAPRIYA BEHERA	LECTURER	P. P. DEV H.S. SCHOOL, TIGIRIA, CUTTACK.

27	JYOTIRMAYEE JENA	LECTURER	KANDARPUR HSS
28	MR. GAURAV SHARMA	LECTURER	NSM CITY HIGHER SECONDARY SCHOOL
29	SAMIHA TABASUM	LECTURER	BANKI HIGHER SECONDARY SCHOOL, BANKI
30	SUDHIR JENA	LECTURER	BAHUGRAM HIGHER SECONDARY SCHOOL, CUTTACK
31	PUSPALATA KAR	LECTURER	GOVT. (SSD) HIGHER SECONDARY SCHOOL, NUAAGADA
32	SOPHIA KUMARI MANDAL	LECTURER	WOMEN'S HIGHER SECONDARY SCHOOL, PARALAKHEMUNDI
33	BINOD CHANDRA RATH	LECTURER	BINODINI SCIENCE HIGHER SECONDARY SCHOOL, PADMAPUR
34	SURAJ SASMAL	LECTURER	SAVITRI WOMEN'S HIGHER SECONDARY SCHOOL
35	DEBASIS RAUTA	LECTURER	KHALLIKOTE HIGHER SECONDARY SCHOOL, BERHAMPUR
36	SANJAYA KUMAR PATRA	LECTURER	ANCHALIKA SCIENCE HIGHER SECONDARY SCHOOL, BALLIPADAR GANJAM
37	RADHAMADHAB MAHAPATRO	LECTURER	SCIENCE HIGHER SECONDARY SCHOOL, HINJILICUT, GANJAM
38	SMT. MAMATA KUMARI SAHU	LECTURER	BASUDEBA SETHY SCIENCE HS SCHOOL, BHATAKUMARADA
39	DR.MAMINI KUMARI MAHARANA	LECTURER	DECAN HIGHER SECONDARY SCHOOL,BERHAMPUR
40	BASUA MURALI DHAR	LECTURER	CITY HIGHER SECONDARY SCHOOL, BERHAMUR
41	HARISCHANNDRA PAIK	LECTURER	RAMAJEE HIGHER SECONDARY SCOOHOL BHISMAGIRI,GANJAM
42	SRI NIRANJAN BEHERA	LECTURER	NSBHSS
43	DR NATABAR JENA	LECTURER	TENTULIA SASAN DEBASTHAN HIGHER SECONDARY SCHOOL, B D PUR
44	SMT. UTKALIKA KUMARI BEHERA	LECTURER	UDAYA PRATAP SCIENCE HIGHER SECONDARY SCHOOL
45	ATMA PRAKASH NAYAK	LECTURER	PEOPLE'S H S SCHOOL BUGUDA EA-29
46	ANJALI MANDAL	LECTURER	KHEMUNDI HIGHER SECONDARY SCHOOL
47	PRAFULLA KANDAGORI	LECTURER	N.B.C HSS, KENDUPADAR
48	DR. SASMITA KUMARI SAHU	LECTURER	SCIENCE COLLEGE,KONKORADA
49	SIBARAM SAHU	LECTURER	NRUSINGHANATH HIGHER SECONDARY SCHOOL,MAHANADAPUR,GANJAM
50	SONALI ROUT	LECTURER	GOVT. SSD HSS, GONASIKA

Introduction

The English Training programme, held from 22nd to 26th December 2024 at Centurion University of Technology and Management, was designed to enhance the tutoring methodologies of English under the CHSE. This five-day programme was carefully structured to give participants a balanced blend of theoretical insight and practical strategies for effective English language instruction. Through a series of interactive workshops, hands-on activities, and expert-led discussions, the programme aimed to: Equip participants with advanced tutoring techniques tailored to the evolving demands of English language education. Introduce participants to innovative approaches and contemporary research in English language teaching and learning. Foster a cooperative environment for sharing ideas, insights, and best practices among educators. Strengthen participants' ability to inspire and engage students through creative and impactful teaching styles.

The programme underlined the significance of staying abreast of the latest developments in English language pedagogy while emphasising practical applications that align with real-world communication needs. It also provided a platform for participants to address gaps in traditional teaching styles by integrating modern technologies, digital tools, and learner-centred approaches into the CHSE curriculum.

This comprehensive training not only sought to consolidate the participants' understanding of English language tutoring but also empowered them with the skills and resources to make English a more dynamic, engaging, and accessible subject for their students.

Broad Objectives

The English Training programme was designed with the following primary objectives:

- **Enhance Language Proficiency:** To develop strong communication skills in English, including reading, writing, speaking, and listening, enabling learners to express themselves effectively and confidently in both academic and real-world contexts.
- **Promote Critical Thinking and Creativity:** To encourage analytical thinking, problem-solving, and creative expression through the study of literature, language, and interdisciplinary content.
- **Align with NEP 2020 Vision:** To integrate holistic and multidisciplinary approaches in English education, fostering a deeper understanding of diverse perspectives, cultures, and global contexts.
- **Empower Educators:** To equip teachers with contemporary pedagogical strategies, resources, and tools to deliver engaging and effective English instruction that inspires and motivates students.
- **Foster Lifelong Learning:** To cultivate a love for language and literature, encouraging continuous self-directed learning and intellectual growth among students.
- **Encourage Collaborative Learning:** To create opportunities for peer-to-peer and teacher-student collaboration, promoting the exchange of ideas, perspectives, and best practices in English education.
- **Bridge Traditional and Modern Methods:** To combine the strengths of traditional teaching methods with innovative, technology-driven approaches, ensuring a balanced and dynamic learning experience.

- **Develop Global Competence:** To prepare learners to engage with global ideas, cultures, and communication styles, fostering empathy, inclusivity, and cross-cultural understanding.
- **Enhance Digital Literacy:** To integrate digital tools and resources into English education, enabling learners to navigate and utilise technology effectively for communication and learning.
- **Inspire Confidence and Self-Expression:** To create a supportive environment where students feel empowered to articulate their thoughts, opinions, and emotions confidently in English.

SPECIFIC OBJECTIVES AND LEARNING OUTCOMES SESSION-WISE

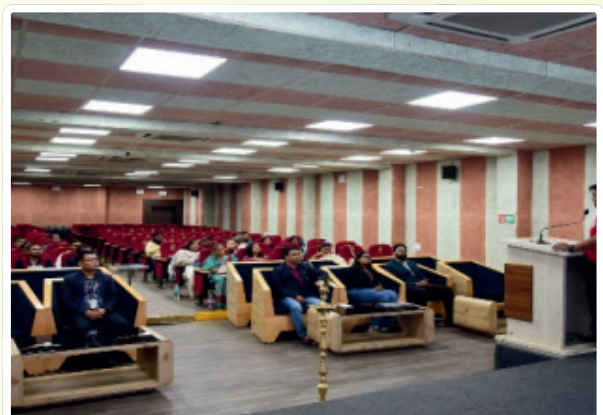
Day 1 (20th Dec 2024)

Session 1: Introduction and Interaction with Participants

This opening session aimed to create a welcoming atmosphere and build a positive rapport between the participants and facilitators. Activities included introductions and a brief outline of the programme's structure. The facilitators encouraged participants to express their expectations and goals for the programme, fostering a sense of inclusivity. By the end of this session, participants felt comfortable and ready to engage, understanding the collaborative and interactive nature of the training.

Session 2: Training programme Details

In this session, facilitators provided an in-depth overview of the programme's framework, breaking down the objectives and content of each session. They highlighted the expected outcomes, how each session would build on the previous one, and the approach to active learning, including group discussions and hands-on activities. Participants gained a clear understanding of the programme's goals, the structure, and what was expected of them, which motivated them to participate actively.



Inaugural Session of the English Teachers Training programme at CUTM

Session 3: Principles of Language Acquisition by Dr. Tapan Kumar Panda

This session focused on the principles of language acquisition, exploring how individuals learn languages, the cognitive processes involved, and the factors influencing language development. Different theories, such as the behaviourist, nativist, and interactionist theories of language acquisition, along with cognitive and social factors in language learning, the role of environment and input in language development, and stages of language acquisition (e.g., phonology, syntax, semantics), were addressed. Participants understood the foundational principles of language acquisition, recognised the stages and factors influencing it, and applied this knowledge to enhance language teaching and learning strategies.



Session on Language Acquisition by Dr. Tapan Kumar Panda

Session 4: Grammar and Vocabulary Strategies by Dr Sashikanta Barik

This session, led by Dr Sashikanta Barik, emphasised mastering grammar and expanding vocabulary through practical, research-based strategies. It focused on understanding grammatical structures, learning word roots, synonyms, and antonyms, and applying these skills in real-life contexts such as writing, speaking, and comprehension. The session also highlighted common errors and provided tools for self-correction, ensuring participants developed a strong linguistic foundation for effective communication. Grammar rules and their application, vocabulary-building techniques, contextual usage and practice, and error identification and correction were discussed. Participants improved their language proficiency, enhanced their communication skills, and increased their confidence in using grammar and vocabulary accurately in both written and spoken contexts.



Grammar and Vocabulary Strategies by Dr. Shashikant Barik

Session 5: Word Games Development by Ms. Ankita Mohanty

This session focused on developing engaging word games for English language learning, emphasising vocabulary building, grammar practice, and creative thinking. It covered game design principles, the integration of vocabulary and grammar, interactive and collaborative activities, and adaptability for different proficiency levels. Teachers created customised word games to enhance students' language skills, foster engagement, and promote active learning in the classroom.



Word Development Session by Ms. Ankita Mohanty

Session 6: Interactive Group Review by Mr. Arpit Suman Swain

This session, led by Mr. Arpit Suman Swain, focused on enhancing teachers' skills in facilitating interactive group discussions, emphasising effective communication, active listening, and fostering collaborative learning environments. It covered techniques for engaging students in discussions, strategies to manage group dynamics, encouraging critical thinking and participation, and providing constructive feedback. Teachers gained practical tools to conduct engaging group discussions, promote student interaction, and create inclusive, thought-provoking classroom environments, ultimately improving learning outcomes.

Day 2 (21st Dec 2024)

Session 7: Importance of Listening, Speaking, Reading, and Writing by Ms. Ankita Mohanty

This session focused on the integrated development of the four core language skills—listening, speaking, reading, and writing (LSRW). It emphasised their interconnectedness in effective communication, highlighted practical strategies to enhance each skill, and provided activities to build confidence and proficiency in real-life and academic contexts.

The key components of language learning include listening, which enhances comprehension and critical thinking; speaking, which builds confidence and communication skills; reading, which expands knowledge and vocabulary; and writing, which develops clarity, creativity, and expression. Participants improved their overall language proficiency, effective communication, and critical thinking, enabling them to excel academically and professionally.

Session 8: Use of AI in English Language Teaching by Dr. Prajna Pani

This session focused on the transformative role of Artificial Intelligence (AI) in English language teaching, highlighting innovative tools, techniques, and strategies to enhance teaching efficiency, learner engagement, and personalised learning experiences. It also addressed the challenges and ethical considerations in integrating AI into language education. The key components included AI-powered language learning tools such as chatbots and grammar checkers, adaptive learning platforms that provide personalised instruction, automated assessment and feedback systems, and the ethical considerations and challenges associated with AI adoption. Participants gained insights into leveraging AI to create interactive, personalised, and efficient English language learning experiences while addressing ethical concerns and practical implementation challenges.



Session on AI tools in Language by Dr. Prajna Pani

Day 3 (24th Dec 2024)

Session 10: Sign Language and Communicative English by Ms. Madhusmita Pattnaik

This session centred on equipping participants with foundational skills in sign language for effective communication with the differently abled community, while simultaneously improving communicative English proficiency. The goal was to promote inclusivity, break communication barriers, and empower individuals to engage confidently in diverse social and professional settings. The programme covered the basics of sign language, including the alphabet, common words, and essential phrases. It also explored non-verbal communication techniques to enhance understanding. Additionally, it focused on communicative English skills for effective interaction. Practical exercises and role-playing activities were incorporated to reinforce learning. Participants gained foundational skills in sign language and communicative English, enabling them to interact effectively with the differently abled community, fostering inclusivity and better communication.



Session on Sign language by Ms. Madhusmita Pattnaik

Session 11: Art of Conducting Group Discussion by Ms. Ankita Mohanty

This session focused on mastering effective communication techniques to express ideas clearly and foster open dialogue. It emphasised understanding group dynamics by recognising roles, managing dominant voices, and ensuring inclusivity. A structured approach was highlighted, including setting agendas, maintaining focus, and achieving objectives. The session also explored problem-solving through discussions to brainstorm solutions and make collaborative decisions. Additionally, it aimed to build confidence by empowering participants to take leadership roles and contribute meaningfully. The session equipped participants with practical tools to conduct engaging and result-oriented group discussions.

The key components of an effective discussion included thorough preparation, which involved understanding the topic, setting objectives, and planning the discussion flow. Strong facilitation skills were essential, such as active listening, encouraging participation, and managing group dynamics. Effective time management ensured that adequate time was allocated to each segment. Conflict resolution played a crucial role in addressing disagreements constructively. Finally, summarisation concluded the discussion by highlighting key takeaways and action points. Participants gained skills to lead productive group discussions, foster collaboration, and achieve meaningful outcomes through effective communication and structured facilitation.

Session 12: Ethics and Psychology: A Comprehensive Guide by Prof. K.V.D. Prakash

This session focused on exploring the intersection of ethics and psychology, emphasising moral decision-making, ethical dilemmas in psychological practice, and the role of ethics in mental health treatment and research. The foundations of ethical theories in psychology provided a basis for understanding moral reasoning and decision-making. Ethical principles played a crucial role in both clinical practice and research, ensuring integrity and professional responsibility. Moral development shaped how individuals made ethical decisions, influencing their actions in various psychological contexts. Addressing ethical dilemmas in therapy and counselling required critical thinking and adherence to ethical guidelines. Additionally, cultural and societal influences significantly impacted ethical practices, shaping perceptions and approaches in diverse settings. Participants gained a deeper understanding of ethical frameworks in psychology, developed skills to navigate moral dilemmas, and applied ethical principles responsibly in professional practice, ensuring client welfare and integrity in research.



Session on Ethics and Psychology by Prof. K.V.D. Prakash, Dean, HRD

Day 4 (25th Dec 2024)

Session 13: Teaching Poetry, Prose, and Drama by Dr. Braja Kishore Sahoo

This session explored effective methods for teaching poetry, prose, and drama, emphasizing comprehension, interpretation, and engagement strategies. It covered literary analysis, performance-based learning, and interactive discussions. The key components included understanding genre-specific teaching techniques, enhancing critical thinking and creativity, integrating multimedia and performance-based approaches, and encouraging student-centred learning and discussions. Participants developed skills to teach literature effectively, fostering deeper appreciation, critical analysis, and interactive learning experiences in poetry, prose, and drama.

Session 14: Critical Thinking Through Literature by Dr. Chandrabhanu Pattnayak

This session emphasised developing critical thinking skills through literature by analysing themes, character motivations, and socio-cultural contexts. It explored various interpretative frameworks and encouraged analytical discussions. The key components included conducting literary analysis for deeper understanding, evaluating multiple perspectives and biases, connecting literature to real-world issues, and encouraging reflective and analytical discussions. Participants enhanced their ability to critically engage with texts, fostering independent thinking, analytical reasoning, and deeper literary appreciation.



Session on Critical Thinking through Literature by Dr. Chandrabhanu Pattnayak

Session 15: Role Play on Literary Works by Ms. Ankita Mohanty

This session explored role-playing as an interactive method for engaging with literary works. It emphasised experiential learning by allowing participants to embody characters, analyse dialogues, and interpret themes dynamically. The key components included character immersion and perspective-taking, dramatisation of key scenes and dialogues, exploration of themes through performance, and the enhancement of communication and interpretative skills. Participants developed a deeper understanding of literary texts, improved interpretative and expressive skills, and fostered creativity and empathy through role-playing.

Session 16: NEP 2020 by Dr. Ajay Nayak, Pro-VC (Administration)

This session, led by Dr. Ajay Kumar Nayak, Pro-VC (Administration), provided an in-depth analysis of the National Education Policy 2020, highlighting its key features, objectives, and the transformative changes it brings to the Indian education system. It also explored the implications for educators, students, and institutions.

The National Education Policy (NEP) 2020 introduced key features such as multidisciplinary education, flexibility, and an emphasis on holistic development. In school education, the policy focuses on foundational literacy, experiential learning, and curriculum restructuring. Higher education reforms include the establishment of multidisciplinary universities, a credit-based system, and an increased focus on research. Additionally, NEP 2020 integrates vocational education and promotes lifelong learning to enhance skill development. However, its implementation faces challenges related to infrastructure, teacher training, and ensuring equity in education. Participants gained a comprehensive understanding of NEP 2020 and its vision for transforming education in India. They were equipped to align their teaching practices with the policy's goals, fostering a more inclusive, flexible, and skill-oriented educational environment.

Day 5 (26th Dec 2024)

Session 17: Strategies for Teaching Comprehension by Dr. Subrat Samal

This session explored effective strategies for teaching comprehension, emphasising reading techniques, critical thinking, and analytical skills to enhance students' understanding of texts. The key components included active reading strategies such as skimming, scanning, and predicting, along with contextual and inferential understanding. Additionally, questioning techniques helped develop critical thinking, while summarisation and paraphrasing skills enhanced comprehension and expression. Participants developed effective methods to teach comprehension, enabling students to analyse texts critically, improve reading skills, and enhance their overall understanding and interpretation.

Session 18: CELTS Exam for the Participants

This session provided an in-depth understanding of the Centurion English Language Testing System (CELTS) exam for CHSE teachers, focusing on test format, key skills, and effective preparation techniques. The key components of the CELTS exam included an overview of its structure, covering listening, reading, writing, and speaking sections. It also involved strategies for improving language proficiency and enhancing test performance. Additionally, common challenges faced by test-takers were addressed, along with effective techniques to overcome them. Lastly, the exam included practice exercises and assessment criteria to help candidates prepare efficiently. Participants developed a strong grasp of CELTS requirements, enhanced their English language skills, and gained confidence in preparing students for the exam effectively.

Session 19: Presentation and Feedback from Participants

In this session, participants had the opportunity to present their learning from the programme, showcasing their understanding of the topics covered. They were also encouraged to provide feedback on the programme to help improve future sessions. Participants demonstrated their grasp of the material and offered constructive feedback that could enhance the programme's effectiveness.

Session 20: Valedictory Function

The programme concluded with a formal valedictory session, during which participants reflected on their experiences, shared key takeaways, and received certificates of participation. This was a celebratory occasion, marking the end of the programme. Participants left with a sense of accomplishment, ready to apply the knowledge gained to their teaching practices and research in English.

Special Session

The Journey of Centurion University and the Importance of Communication Skills

Speaker: Prof. (Dr.) Mukti Kanta Mishra (President, CUTM)

This interactive session focused on the establishment of English studies at Centurion University, the diverse literary traditions explored within the department, and the pivotal role of language in shaping critical perspectives. Prof. (Dr.) Mukti Kanta Mishra shared his inspiring journey of founding Centurion University and its transformation into a multidisciplinary institution with a strong emphasis on English studies. He highlighted the diverse literary and linguistic approaches incorporated into the curriculum, underscoring their intellectual and cultural significance. Participants explored the concept of Literary Landscapes, an initiative that fosters critical engagement with texts across genres, periods, and perspectives. This session provided valuable insights into integrating literary scholarship with interdisciplinary education and research, while emphasizing the importance of communication skills in enhancing learning and professional development.



Session on the Importance of Language by Prof. (Dr.) Mukti Kanta Mishra (President, CUTM)

Campus Tour

A campus tour of various production units at Centurion University was conducted. This tour was designed to provide participants with insights into the university's diverse and innovative units focused on technology, sustainability, and vocational education. The session spanned from 09:30 am to 01:00 pm and covered a range of topics, including renewable energy, sustainable practices, paramedic education, and cutting-edge technologies. The following report outlines the key highlights and learning outcomes from each session.

Tour Schedule and Learning Outcomes

9:30 AM – 9:50 AM: Pollinators' Paradise, CDC, Transformer, Waste to Wealth, WELL

The first stop of the tour included Pollinators' Paradise, the CDC (Career Development Centre), the Transformer unit, the Waste to Wealth initiative, and WELL (Water, Energy, and Livelihood).

9:50 AM – 10:10 AM: School of Paramedics/Law

A visit to the School of Paramedics and the School of Law provided insights into the educational approaches and technologies used in these disciplines.

10:10 AM – 10:30 AM: Renewable Energy

This session focused on renewable energy solutions implemented at Centurion University, highlighting the role of solar, wind, and other renewable sources in the university's sustainability efforts.

10:30 AM – 10:50 AM: Apparel COE

The Apparel Centre of Excellence (COE) presented innovations in the textile and apparel industry. Participants were shown the latest advancements in fabric production, garment design, and manufacturing techniques. They also explored how the COE fosters skill development in textile production and fashion design, preparing students for the competitive apparel industry.

10:50 AM – 11:10 AM: Centurion Experience Centre

The Experience Centre showcased various products being manufactured at the university.

11:10 AM – 11:30 AM: ASDC ITI/ITOT/Ashok Leyland/Hyundai, Yamaha

This session highlighted the collaboration between the Automotive Skills Development Council (ASDC) and industry leaders such as Ashok Leyland, Hyundai, and Yamaha. Participants observed the advanced training programmes offered through these collaborations, covering everything from automotive mechanics to customer service. The session emphasised the importance of industry-academia partnerships in developing skilled professionals for the automotive sector.

11:30 AM – 11:50 AM: Future Nexus, AR/VR

Future Nexus, an advanced research unit, introduced participants to the future of AR/VR applications. Participants learnt about the latest trends in AR/VR technologies, including their use in virtual simulations, remote collaboration, and immersive learning. They were shown how these technologies are shaping the future of education and industry applications.

11:50 AM – 12:10 PM: EV, CNC, 3D Printing

This session introduced participants to innovations in electric vehicles (EVs), computer numerical control (CNC) machining, and 3D printing technologies.

12:10 PM – 1:00 PM: School of Maritime

The final stop was the School of Maritime, where participants learnt about the programmes and facilities related to maritime studies and shipbuilding. Participants were introduced to cutting-edge technology used in the maritime industry, including ship design, navigation, and sustainable practices for marine resource management. The session emphasised the growing importance of maritime education in global trade and environmental conservation.

Glimpses



Campus Tour by the Participants



Participants at the Yoga Session

Conclusion

The English teachers' training programme at Centurion University has successfully provided participants with an in-depth and practical understanding of the diverse fields within English and various interdisciplinary technologies. Over the course of several days, participants were exposed to cutting-edge research, innovative practices, and hands-on applications that bridge the gap between theoretical knowledge and real-world implementation. From learning about the National Education Policy 2020 and its alignment with modern educational strategies to exploring advanced sustainable practices, participants have gained invaluable insights into both the academic and practical aspects of their disciplines.

Additionally, the exposure to various production units, including those focused on renewable energy, paramedics, apparel design, and even AR/VR technologies, has demonstrated the breadth of knowledge and innovative spirit fostered at Centurion University. The campus tour, particularly to production units such as the EV, CNC, 3D printing, and the School of Maritime, further broadened participants' perspectives by highlighting the importance of industry-academia collaborations and the future of emerging technologies.

This training programme not only enhanced the participants' knowledge but also fostered a deeper appreciation for integrating sustainability, innovation, and hands-on learning into their respective fields. It has prepared them to apply this learning in their own academic or professional settings and make meaningful contributions to their industries.

The programme has been an enriching experience that equipped participants with both theoretical foundations and practical skills. We are confident that the insights gained from this training will inspire participants to bring positive changes to their teaching practices, research efforts, and future careers. We extend our sincere thanks to all the facilitators, industry partners, and participants for making this programme a success, and we look forward to seeing the continued application of the knowledge shared throughout this journey.



Valedictory Ceremony for the English Teachers Training programme

ANNEXURE-I

Attendance Sheet

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA

TRAINING PROGRAMME IN ENGLISH

REGISTRATION FORM

Date: December 22-26, 2024

Place: Hall No. 6, Aryahatta Building, Centurion University of Technology and Management (CUTM), Ramachandrapur, Jatni, Bhubaneswar, Odisha

Sl. No.	Name	Designation	District	Name of Higher Secondary School	Phone No	Signature of Participants (Name in Block Letter)
1	SUSHI ANKITA KHORA	PGT	Kalahandi	LADUGAON HIGHER SECONDARY SCHOOL	9178676979	SUSHI ANKITA KHORA
2	SRI GURUBARU SENDURIA	JR LECTURER	Balangir	GOVT WOMEN'S HIGHER SECONDARY SCHOOL, TITILAGARH	9937849971	
3	Sivananda Thapapati	LECTURER	Balangir	Biconapuri Higher Secondary school Dhanabata	9040109089	SIBGNANDA THANAPATI
4	BIKRAM TANDI	JR LECTURER	Balangir	PS HIGHER SECONDARY SCHOOL MURIBAHAL	9348513942	BIKRAM TANDI
5	Sunita Nayak	PGT	Balangir	Govt. SSD HSS, Chudipali	7978322184	SUNITA NAYAK
6	AMITABH KUMAR PATEL	LECTURER	Balangir	PANCHAYAT HIGHER SECONDARY SCHOOL, GHUNAR	9938732142	AMITABH KUMAR PATEL
7	Nrupama Sahoo	LECTURER	Balangir	Radhahyam anchalik HSS Bilaswada	6372932978	
8	SRI LAXMANA MEHER	LECTURER	Bouda	BOUDI PANCHAYAT HIGHER SECONDARY SCHOOL, BOUDH	977236884	LAXMANA MEHER
9	SHESHADEV PARDIA	LECTURER	Bouda	SBAHSS	7008612412	SHESHADEV PARDIA

(NAME IN CAPITAL LETTERS)

10	Aqina Patro	LECTURER	Cuttack	Mahapurus Achyutananda Higher Secondary School, Lamsala-Cuttack	7126868389	
11	LOKESWAR SUNA	LECTURER	Cuttack	SUBHADRA MAHATAB HIGHER SECONDARY SCHOOL, ASURESWAR	6372126470	LOKESWAR SUNA
12	Aseema Turkey	LECTURER	Cuttack	Panchayat Prabalad Higher Secondary School, Nubhokraokh	9668615865	ASEEMA TURKEY
13	Sweta Rathor	LECTURER	Cuttack	Brabhanjharilo Mahavidyalyaya	8598952643	
14	Sankhya Das	LECTURER	Cuttack	Indra Gandhi Higher Secondary School	93481 07411	
15	Mi Rajan Karan Sahu	LECTURER	Cuttack	Choudwar Junior College	7749001839	
16	Sushree Saugata Panda	LECTURER	Cuttack	D.G.B.K H.S.S, Karanda, Cuttack	9337652255	
17	Remakanta Jagan	LECTURER	Cuttack	Mohan Sahasli Higher Secondary school	7750893153	
18	RASMI RANJAN KHATOI	PGT	Cuttack	U.N. H.S. SCHOOL OF SC & TECH, ADASPUR, CUTTACK	8458044434	
19	Dr. Mantra Salim	LECTURER	Cuttack	Stewart Science College Higher Secondary School	9776328565	
20	Ms. Prachurya Das	LECTURER	Cuttack	Niali H.S. School	9958567560	PRACHURYA DAS
21	Meghamala sarapathy	LECTURER	Cuttack	Christ higher secondary school	9658225568	A
22	Ashis Kumar Baral	LECTURER	Cuttack	Jawalalal Nehru Higher Secondary School, Kamrupi, Cuttack	9439486816	ASHIS KUMAR BARAL
23	Ashlata Pradhan	LECTURER	Cuttack	Lakshmeswar Women's Higher Secondary School	8668730050	
24	SAMBIT KUMAR MISHRA	LECTURER	Cuttack	BALLAVI DEVI MAHILA HIGHER SECONDARY SCHOOL	9437118616	

(NAME IN CAPITAL LETTERS)

25	Nivedita Mohapatra	JR LECTURER	Cuttack	Shakti Higher Secondary School	8658810296	
26	Pujariya Behera	LECTURER	Cuttack	P.P. Dev H.S. School, Tigra, Cuttack.	8118945643	
27	JYOTIRMAYEE JENA	LECTURER	Cuttack	KANDARPUR HSS	9668673519	JYOTIRMAYEE JENA
28	Mr. Gaurav Sharma	LECTURER	Cuttack	NSM City Higher Secondary school	7008108422	
29	Samiba Tabasum	LECTURER	Cuttack	Banki Higher Secondary School, Banki	7077419185	
30	Sudhir Jena	PGT	Cuttack	Bahugram Higher Secondary School, Cuttack	9937601798	SUDHIR JENA
31	PUSPALATA KAR	PGT	Gajapati	GOVT.(SSD) HIGHER SECONDARY SCHOOL, NUAAGADA	7978764707	PUSPALATA KAR
32	Sophia Kumari Mandal	LECTURER	Gajapati	Women's Higher Secondary School, Parakkhemundi	7077567617	
33	BINOD CHANDRA RATH	LECTURER	Gajapati	BINDINI SCIENCE HIGHER SECONDARY SCHOOL, PADMAPUR	9668598847	BINOD CHANDRA RATH
34	Suraj Sasmal	LECTURER	Ganjam	Savitri Womens higher secondary school	7008142410	SURAJ SASMAL
35	DEBASIS RAUTA	PGT	Ganjam	KHALIKOTE HIGHER SECONDARY SCHOOL, BHAMPUR	8895750596	
36	SANJAYA KUMAR PATRA	JR LECTURER	Ganjam	ANCHALIKA SCIENCE HIGHER SECONDARY SCHOOL BALLIPADAR GANJAM	9861305215	SANJAYA KUMAR PATRA
37	RADHAMADHAB MAHAPATRO	LECTURER	Ganjam	SCIENCE HIGHER SECONDARY SCHOOL, HINJICUT, GANJAM	9348556331	RADHAMADHAB MAHAPATRO
38	SMT. MAMATA KUMARI SAHU	LECTURER	Ganjam	IBASUDEBA SETHY SCIENCE HS SCHOOL, BHATAKUMARADA	9090894659	MAMATA KUMARI SAHU
39	Dr.Mammi Kumari Maharana	LECTURER	Ganjam	Dean Higher Secondary School, Berhampur	9337212828	MAMMI KUMARI MAHARANA

(NAME IN CAPITAL LETTERS)

40	BASUA MURALI DHAR	LECTURER	Ganjam	CITY HIGHER SECONDARY SCHOOL, BERHAMPUR	7873958400	BASUA MURALI DHAR
41	HARISCHANDRA PAIK	LECTURER	Ganjam	Ramajeet Higher secondary school Bhitmagri, Ganjam	80189999089	HARISCHANDRA PAIK
42	Sri Niranjana Behera	LECTURER	Ganjam	nbbis	8249019130	NIRANJANA BEHERA
43	DR NATABAR JENA	LECTURER	Ganjam	TENTULLA SASAN DEBASTHAN HIGHER SECONDARY SCHOOL, B D PUR	6371819556 9871422616	NATABAR JENA
44	Smt. Utkalika Kumari Behera	LECTURER	Ganjam	Udaya Pratap Science Higher Secondary School	7901768097	UTKALIKA KUMARI BEHERA
45	Atma Prakash Nayak	LECTURER	Ganjam	Peoples H S School Buguda EA-29	6371421335	
46	ANJALI MANDAL	LECTURER	Ganjam	KHEMUNDI HIGHER SECONDARY SCHOOL	9937600168	
47	Prafulla Kandagori	LECTURER	Ganjam	N.B.C HSS, Kendapadar	9439751262	PRAFULLA KANDAGORI
48	Dr. Sasmata Kumari Sahu	LECTURER	Ganjam	Science college, korikonda	8249898961	SASMITA KUMARI SAHU
49	Sibararam Sahu	LECTURER	Ganjam	Narsingharath Higher Secondary School, Mahanadpur, Ganjam	9348891157	SIBARAM SAHU
50	Sonali Rout	PGT	Kendujhar (Keonjhar)	Govt. SSD HSS, Gonsika	8280004438	SONALI ROUT
51	Mr. Dhusmanta Choudhury	LECTURER	Koraput	Dr. B.R. Ambedkar Higher Secondary School, Lamaput	7008095175	DUSMANTA CHOUHURY
52	Sanjuktta Pangi	LECTURER	Nabarangpur	Nabarangpur College	793887324 8762781808	SANJUKTA PANGI
53	Sunayana Mahapatra	PGT	Nabarangpur	Govt. SSD GIRLS HIGHER SECONDARY SCHOOL, PAPADAHANDI	7978251447	SUNAYANA MAHAPATRA
54	Sri Soumya Suman Saboo	LECTURER	Neyyath	Neelamadhab Higher Secondary School, Kantilo		

(NAME IN CAPITAL LETTERS)

55	Dr. Saroj Mondal <i>Dr. Saroj Mondal</i>	LECTURER	Nayagrh	Brundaban Subalbi Higher Secondary School, Dupalla	7028308762	DR. SAROJA MANDAL
56	Ayodhyanath Das	LECTURER	Nuapada	Sinapali H.S.S, Sinapali	7077849504	AYODHYANATH DAS
57	Padman Naik	LECTURER	Rayagada	Gurugur Higher Secondary School, Gurugur	8912422008	PADMAN NAIK
58	Ashutosh Pradhan	LECTURER	Subarnapur (Sonepur)	Higher Secondary School, Binka		
59	Pinki Dash	LECTURER	Subarnapur (Sonepur)	Gram Panchayat Higher Secondary School, Lachhipur	7978927190	PINKI DASH
60	Raju Dash	LECTURER	Subarnapur (Sonepur)	Jaloe Higher Secondary School, Jaloe		
61	Arpita Nayak	PGT	Subarnapur (Sonepur)	Subalaya HSS, Subalaya		
62	Jyoti Prakash Tandi	LECTURER	Subarnapur (Sonepur)	Panchayat Higher Secondary School, Charbhata	9348666659	JYOTI PRAKASH TANDI
63	Jagannath Pattnaik	LECTURER	Ganjam	Somanath Science H.S. School	9438851960	JAGANNATH PATNAIK

Sl. No.	Name	Designation	District	Name of Higher Secondary School	Phone No	Signature of Participants (Name in Block Letter)
1	Sanjaya Kumar Mallick	Lecturer	Puri	Ratanpur Science Higher Secondary School, Ratanpur	7758991323	SANJAYA KUMAR MALLICK
2	Dr. Monalisa Mishra	Lecturer	Cuttack	Bahagram Higher Secondary School	97504613520 9437445687	DR. MONALISA MISHRA
3	Ambikala Rout	Jr. Lecturer	Cuttack	Durga Charan Nayak Memorial Higher Secondary School	9668882223	AMBIKA BALA ROUT
4	Ajaya Kumar Acharya	Lecturer	Cuttack	D.K.N. H.S. School, Eranch, Cuttack	9438018708	AJAYA KUMAR ACHARYA
5	Laxmidhar Das	Lecturer	Nayagrh	S.L.A.H.S. School, Goidipada	9027680985	LAXMIDHAR DAS
6	Swarna Mohanty	Lecturer	Puri	Indira Gandhi Women's H.S.S, Nimupara, Puri	8763818358	SWARNA MOHANTY
7	Satyajit Sahoo	Lecturer	Puri	Indira Gandhi Women's H.S.S, Nimupara, Puri	933263319	SATYAJIT SAHOO
8	Gitanidhi Swain	Lecturer	Puri	Banibreez Higher Secondary School	9561256 492	GITANIDHI SWAIN
9	Puspanjali Narendra	Lecturer	Khordha	Kerenga Panchayat Higher Secondary School	998894624	PUSPAJALI NARENDRA

10	Dr. Debaraj Swain	Lecturer	Khordha	Acharya Harihar Higher Secondary School	961462015	DR. DEBARAJ SWAIN
11	Anupama Champatiray	Lecturer	Khordha	Sri Jagannath Higher Secondary School, Kapardar		
12	Prafulla Kumar Champatiray	Lecturer	Khordha	Kamala Nehru Womens H.S.S, BBSR		
13	Santosh Kumar Harichandan	Lecturer	Khordha	Sara Patkaray Higher Secondary School	9056344293	SANTOSH KUMAR HARICHANDAN

ANNEXURE-II

Feedback Report

My Takeaway from the Campus tour

Unfortunately, humans have not been very good stewards of the earth over the years. To protect the environment and preserve the planet for future generations, CUTM has taken proactive steps toward cleaner living habits.

We can't stop consuming but we have to be mindful of our consumption habits and its effects upon the ecosystem. The CUTM gives a lot of attention on the three 'R's - reduce, reuse and recycle for curbing consumption and its impact on the environment. Another 'R' i.e. 'rot' makes an incredible amount of trash out of the waste stream and produces free, rich soil to use in the garden. The CUTM has switched to reusable items and made a commitment to use them as often as possible. Now, if we turn to the final 'R' i.e. recycling. The University recycles the waste water from the tanks and makes it usable for the indwellers as well as for other works.

This approach of CUTM has attracted me a lot and this is my takeaway during the time of campus tour.

Ashis Kumar Barel
Lect-in-English
J.N. College, Kuanpal

ANNEXURE-III

SDG Reports

Name - AYODHYANATH DAS

Lect. in English, Sinapali HSS, Sinapali, NUAPADA.

CAREER COUNSELING

Career counselling plays a vital role in shaping the future of students, particularly those at the +2 level who are at a crucial juncture in their academic and professional lives. As a teacher I must understand the benefits of career counseling is equally essential as we serve as mentors and guides who can influence students decisions as I am serving in a rural tribal area of Odisha.

Here I learn the advantages of career counseling for +2 students and how it could aids them in effect them in guiding. I learn comprehensive knowledge of diverse career options, industry trends, and educational pathways. With this expertise I understood about the dynamic job market and align their advice with my students aspirations and abilities. I can now act as a good mediator between students and rapidly changing professional world.

WASH, GPHSS, Lachhipur

CLEAN WATER AND SANITATION

Throughout this 5 day training programme at CUTM, ~~the~~ good clean water and sanitation condition, aligning with Sustainable Development Goal 6 in campus is taken care properly. The CUTM university has taken many steps for sustainable water use and effective sanitation practices, which is essential need for every students.

The university provides clean water all the campus. The guesthouse, where we stayed for 5 days is in very good sanitation condition and we eat in dining hall purified water is always available and no shortage of water. CUTM also promotes hygiene and sanitation through its "Cleanliness is Godliness" campaign, emphasizing the use of eco-friendly cleaning materials to minimize water waste. The most important thing I like about CUTM is wise use of water resources and ensures that waste water is treated and reused for purposes like gardening, landscaping.

CUTM has always tried robust policies and practices to ensure clean water and sanitation on campus.

Thank You

Name - Padman Naik, Lect in English
Institution - Gunupur college, Gunupur, Rayagada
Topic - Clean Water and Sanitation

I have been assigned the task by CUTM to choose one ~~SDG~~ SDG to relate my experience during the time of Campus tour. I would like to write on Clean Water and Sanitation for partial fulfillment of the teacher training programme.

Clean water and sanitation are essential for human health, dignity and well-being. Here are some key facts and issues related to Clean Water and Sanitation, such as water related diseases, water pollution etc.

During my campus visit I found an impressive water recycling mechanism and its process. It is needed to the society to learn how to purify the waste water into usable water in many cities. Here I also found that people are making ^{usable} ~~usable~~ materials from the waste, in addition to that the process and the planning of these things are great example for the society. The institution does not focus only on water but it also focuses for ^{making} greenery campus which is one of the best skills to learn to make our environment pure and green.

Centurion University emphasizes on skill integrated quality higher education which was quite evident from the campus, as well it aligns with Quality Education, 4th SDGs.

Another astonishing fact was the number of collaborators, & startups that this university has fostered, like centurion transformers, sky rider EV etc. These clearly highlights Partnership for goals, SDG 17 which creates an ecosystem of innovation & entrepreneurship.

Initiatives like sky rider EV, nurtures advancements in sustainable mobility, green infrastructure, creates jobs with global sustainability goals like the 7th 8th & 9th, Affordable and Clean energy, Decent work and Economic growth, Industry innovation & Infrastructure.

DiaFit vice, is a key project committed to advancing societal well being through impactful research, again which keeps up with 3rd SDG, Good Health & well-being.

Boards & files being made in the campus are used to build the campus was quite unique way for self sustainability & promoting bee keeping as a skill contributor.

diversity, conservation and sustainable livelihood initiative, again aligns to SDGs 11th 12th & 15th. I hope, more innovations flourish, more enterprises be set up in the near future, with Centurion university as a guide.

-Rupsa Mahtua

ANNEXURE-IV

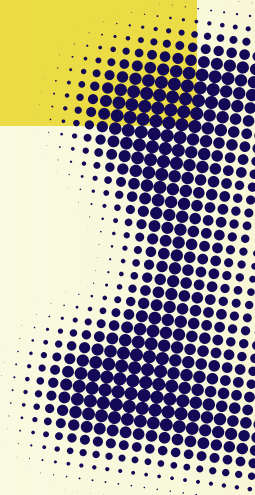
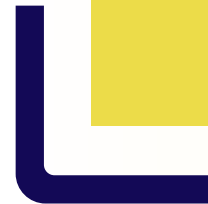
Session Plan

Date	Day	9:30 - 11:00 AM	11:00 - 11:30 AM	11:30 - 1:00 PM	1:00 - 2:00 PM	2:00 - 3:15 PM	3:30 - 5:00 PM
22.12.2024	English - Day 1	Principles of Language Acquisition (Dr. Tapan Kumar Panda)	TEA BREAK	Grammar and Vocabulary Strategies (Dr. Sashikanta Barik)	LUNCH BREAK	Word Games Development (Ms. Ankita Mohanty)	Interactive Group Review (Mr. Arpit Suman Swain)
23.12.2024	English - Day 2	Campus Tour (Ms. Nirlipta Pattnaik & Mr. Arpit Suman)		Importance of LSRW (Ms. Ankita Mohanty)		Briefing of CELTS & Use of AI in English Language Teaching (Dr. Prajna Pani)	
24.12.2024	English - Day 3	Speaking Their Language: Inclusive Practices for Differently Abled Learners (Ms. Shreejaya Satpathy) & Effective Communication and Business Letter Writing (Ms. Madhusmita Pattnaik)		CELTS Exam (All Faculty)		Art of Conducting Group Discussions (Ms. Ankita Mohanty & Mr. Arpit Suman Swain)	Interaction with President facilitated by Prof. KVD Prakash
25.12.2024	English - Day 4	Teaching Poetry, Prose, and Drama (Dr. Braja Kishore Sahoo)		Critical Thinking through Literature (Dr. Chandrabhanu Pattanayak)		Role Play on Literary Works (Ms. Ankita Mohanty)	Reflection and Discussions on NEP 2020 and Integration of Skill (Dr. Chandrabhanu Pattanayak)
26.12.2024	English - Day 5	Digital Tools for English Teaching (Dr. Rabindra Pradhan)		Strategies for Teaching Comprehension (Dr. Subrat Samal)		Tool-Based Learning Record (Mr. Arpit Suman Swain)	Valedictory, Feedback and Takeaways (Dr. T.K. Panda)



SNIPPET ON

**TEACHERS TRAINING PROGRAMME
FOR ENGLISH TEACHERS (PHASE-02)
SPONSORED BY COUNCIL OF HIGHER
SECONDARY EDUCATION (CHSE)
GOVT. OF ODISHA, INDIA**



Facilitators and Presenters

SL. NO.	NAME	POSITION	SUBJECT
1.	PROF. (DR.) MUKTI KANTA MISHRA	(PRESIDENT, CUTM)	THE JOURNEY OF CENTURION UNIVERSITY AND THE POWER OF LANGUAGE AND COMMUNICATION
2.	DR. SASHIKANTA BARIK	PROFESSOR	GRAMMAR AND VOCABULARY STRATEGIES
3.	DR. BRAJA KISHORE SAHOO	PROFESSOR	TEACHING POETRY, PROSE, AND DRAMA
4.	DR. CHANDRABHANU PATTANAYAK	PROFESSOR	CRITICAL THINKING THROUGH LITERATURE
5.	DR. RABINDRA PRADHAN	PROFESSOR	DIGITAL TOOLS FOR ENGLISH TEACHING
6.	DR. SUBRAT SAMAL	PROFESSOR	STRATEGIES FOR TEACHING COMPREHENSION, STRATEGIES FOR TEACHING COMPREHENSION
7.	DR. TAPAN KUMAR PANDA	PROFESSOR	PRINCIPLES OF LANGUAGE ACQUISITION
8.	MS. ANKITA MOHANTY	PROFESSOR	WORD GAMES DEVELOPMENT, IMPORTANCE OF LSRW, ART OF CONDUCTING GROUP DISCUSSIONS, ROLE PLAY ON LITERARY WORKS
9.	MR. ARPIT SUMAN SWAIN	PROFESSOR	INTERACTIVE GROUP REVIEW, ART OF CONDUCTING GROUP DISCUSSIONS, TOOL-BASED LEARNING RECORD
10.	DR. PRAJNA PANI	PROFESSOR	BRIEFING OF CELTS & USE OF AI IN ENGLISH LANGUAGE TEACHING
11.	MS. SHREEJAYA SATAPATHY	PROFESSOR	SPEAKING THEIR LANGUAGE: INCLUSIVE PRACTICES FOR DIFFERENTLY ABLED LEARNERS
12.	MS. MADHUSMITA PATNAIK	PROFESSOR	EFFECTIVE COMMUNICATION AND BUSINESS LETTER WRITING
13.	PROF. AJAYA KUMAR NAYAK	PROFESSOR	REFLECTION AND DISCUSSIONS ON NEP 2020 AND INTEGRATION OF SKILLS
14.	DEBASHISH MAHAPATRA	PROFESSOR	LINGUISTICS AND PHONETICS
15.	DR. KALIKINKAR PATTANAIK	PROFESSOR	GRAMMAR AND VOCABULARY II

Names of Attendees

SL. NO.	NAME	POSITION	SCHOOL
1	BIMAL KUMAR PANIGRAHY	LECTURER	BARTINI SCIENCE HIGHER SECONDARY SCHOOL
2	DHANITRI NAYAK	LECTURER	REGIONAL WOMEN'S HIGHER SECONDARY SCHOOL, POLASARA
3	RAMESH CHANDRA MAHANANDA	LECTURER	SHREE JAGANNATH HIGHER SECONDARY SCHOOL, NAUGAONHAT
4	ASWATHI K NAIR	LECTURER	SRI SRI JAGANNATH HIGHER SECONDARY SCHOOL
5	SHRABANI PATTANAYAK	LECTURER	ALAKA HIGHER SECONDARY SCHOOL, ANANTABATA
6	LOKANATH CHHATRIA	LECTURER	GOVT HIGHER SECONDARY SCHOOL NUAGAON, GOLAMUNDA
7	AKSHAYA KUMAR PATTANAIK	LECTURER	LAKHIRAM AGRAWAL HIGHER SECONDARY SCHOOL, BEHERA
8	GOPAL CHANDRA PRADHAN	LECTURER	KASHRUPADA HIGHER SECONDARY SCHOOL KASHRUPADA
9	SHISHIR KUMAR SAHU	LECTURER	ANCHALIKA BASTARANI H S SCHOOL
10	BHABANI PRASAD BISWAL	LECTURER	GOVT. (SSD) HIGHER SECONDARY SCHOOL, KUDUTULI, KANDHAMAL
11	HAMAN KUMAR DIBAKA	LECTURER	ADIVASI HSC, BALLIGUDA
12	SIBARAM BEHERA	LECTURER	ANCHALIKA HSS SANKARAKHOL
13	CHANDRAKANT ROUT	LECTURER	SAILENDRA NARAYAN H.S. SCHOOL, RAJANIKA
14	SONITA PRADHAN	LECTURER	SUSHREE DEVI WOMEN'S HSS, AUL
15	MADHUSMITA NAIK	LECTURER	KORUA WOMEN'S HIGHER SECONDARY SCHOOL
16	HAREKRUSHNA BARIK	LECTURER	BIJU PATTANAIK HIGHER SECONDARY SCHOOL, ANTEI, KENDRAPARA
17	DR. SAKTI SEKHAR DASH	LECTURER	TULASI WOMEN'S HIGHER SECONDARY SCHOOL
18	LIPSA MAHANKUDA	LECTURER	RAMADEVI WOMEN'S HSS, BHUBANESWAR
19	SHYAMAA PRASAD SATAPATHY	LECTURER	RAMAMANI HIGHER SECONDARY SCHOOL
20	CHANDAN PRASAD JENA	LECTURER	NACHUNI HIGHER SECONDARY SCHOOL
21	SHUBHAJIT NAYAK	LECTURER	SALIPUR HIGHER SECONDARY SCHOOL, SALIPUR
22	SWARUPANJALI BAG	LECTURER	MAHARISHI HIGHER SECONDARY SCHOOL OF NATURAL LAW, BHUBANESWAR

23	JAYASHREE DAS	LECTURER	JANATA HIGHER SECONDARY SCHOOL, KUHUDI
24	MICKEY MANASWINI	LECTURER	GODAVARIS HIGHER SECONDARY SCHOOL
25	SUBHEN DASH	LECTURER	MAA SARADA WOMEN'S HIGHER SECONDARY SCHOOL, TIKATAL, KHORDHA
26	PATITAPABAN PANDA	LECTURER	BALUGAON HIGHER SECONDARY SCHOOL
27	DR. DEVISHREE MOHAPATRA	LECTURER	PRANANATH HIGHER SECONDARY SCHOOL
28	ABHISEK PANDA	LECTURER	KSHETRABASI D.A.V. HIGHER SECONDARY SCHOOL
29	SUVRA BEHERA	LECTURER	PARAMANANDA HIGHER SECONDARY SCHOOL
30	ANANDA SANKAR PALEI	LECTURER	HATTAKESWAR MAHILA HIGHER SECONDARY SCHOOL, BAGHAMARI
31	BIJAY KUMAR DAS	LECTURER	GOVT. HIGHER SECONDARY SCHOOL, BORIGAM
32	DR. BILKESH PARVEEN	LECTURER	TANGI HIGHER SECONDARY SCHOOL
33	DR. PADMALAYA SARANGI	LECTURER	JIRAL HIGHER SECONDARY SCHOOL
34	SAGAR PRASAD LENKA	LECTURER	BELLAGUNTHA WOMEN'S HIGHER SECONDARY SCHOOL BELLAGUNTHA
35	DURYADHAN JENA	LECTURER	SCIENCE HIGHER SECONDARY SCHOOL PUDAMARI
36	NRUSINHA CHARAN PATTNAIK	LECTURER	KHAMBEYA DORA SCIENCE HIGHER SECONDARY SCHOOL, POCHILIMA
37	SURESH KUMAR PATRO	LECTURER	KHAMBEYA DORA SCIENCE HIGHER SECONDARY SCHOOL
38	SRI NARENDRA KUMAR PATRA	LECTURER	BASUDEBA SETHY SCIENCE HS SCHOOL, BHATAKUMARADA
39	RADHAMADHAB PRADHAN	LECTURER	PK WOMEN'S H.S.SCHOOL
40	SANTOSH KUMAR PANDA	LECTURER	BALIKUDA HS SCHOOL
41	SOUGAT KUMAR SAHU	LECTURER	BALIKUDA WOMEN'S HIGHER SECONDARY SCHOOL, BALIKUDA
42	ASHOK KUMAR SAHOO	LECTURER	CHICHAIGUDA HIGHER SECONDARY SCHOOL
43	PRAVAKAR DAS	LECTURER	H.N.S. HIGHER SECONDARY SCHOOL
44	DILLIP KUMAR SAHOO	LECTURER	LOKANATH HIGHER SECONDARY SCHOOL, PATKURA
45	BIDHU PRASAD SAHOO	LECTURER	AMBEDKAR CENTENARY HSS OF EDUCATION & TECHNOLOGY DUMUDUMA, BHUBANESWAR.751019
46	UTPAL KUMAR PRADHAN	LECTURER	SANATAN HARICHANDAN HIGHER SECONDARY SCHOOL
47	ANUPAMA CHAMPATTIRAY	LECTURER	SRI JAGANNATH HIGHER SECONDARY SCHOOL, KAIPADAR
48	SHANKAR KUMAR NALLA	LECTURER	JHARIGAM HIGHER SECONDARY SCHOOL
49	DHIRENDRA KUMAR MAHARANA	LECTURER	K.P.D. WOMEN'S HIGHER SECONDARY SCHOOL, DASPALLA
50	BIRANCHI KUMAR MAHARANA	LECTURER	WOMEN'S HIGHER SECONDARY SCHOOL, KHANDAPADA

Introduction

The English Training programme, held from 15th to 19th December 2024 at Centurion University of Technology and Management, was designed to enhance the tutoring methodologies and professional expertise of English educators under the CHSE. This five-day programme was carefully structured to provide participants with a balanced blend of theoretical insights and practical strategies for effective English language instruction. Through a series of interactive workshops, hands-on activities, and expert-led discussions, the programme aimed to:

- Equip participants with advanced tutoring techniques tailored to the evolving demands of English language education.
- Introduce participants to innovative approaches and contemporary research in English language teaching and learning.
- Foster a cooperative environment for sharing ideas, insights, and best practices among educators.
- Strengthen participants' ability to inspire and engage students through creative and impactful teaching styles.

The programme underscored the importance of staying abreast of the latest developments in English language pedagogy while emphasising practical applications that align with real-world communication needs. It also provided a platform for participants to address gaps in traditional teaching styles by integrating modern technologies, digital tools, and learner-centred approaches into the CHSE curriculum.

This comprehensive training not only sought to consolidate the participants' understanding of English language tutoring but also empowered them with the skills and resources to make English a more dynamic, engaging, and accessible subject for their students.

Broad Objectives

The English Training programme was designed with the following primary objectives:

- **Enhance Language Proficiency:** To develop strong communication skills in English, including reading, writing, speaking, and listening, enabling learners to express themselves effectively and confidently in both academic and real-world contexts.
- **Promote Critical Thinking and Creativity:** To encourage analytical thinking, problem-solving, and creative expression through the study of literature, language, and interdisciplinary content.
- **Align with NEP 2020 Vision:** To integrate holistic and multidisciplinary approaches in English education, fostering a deeper understanding of diverse perspectives, cultures, and global contexts.
- **Empower Educators:** To equip teachers with contemporary pedagogical strategies, resources, and tools to deliver engaging and effective English instruction that inspires and motivates students.
- **Foster Lifelong Learning:** To cultivate a love for language and literature, encouraging continuous self-directed learning and intellectual growth among students.
- **Encourage Collaborative Learning:** To create opportunities for peer-to-peer and teacher-student collaboration, promoting the exchange of ideas, perspectives, and best practices in English education.
- **Bridge Traditional and Modern Methods:** To combine the strengths of traditional teaching methods with innovative, technology-driven approaches, ensuring a balanced and dynamic learning experience.

Develop Global Competence: To prepare learners to engage with global ideas, cultures, and communication styles, fostering empathy, inclusivity, and cross-cultural understanding.

Enhance Digital Literacy: To integrate digital tools and resources into English education, enabling learners to navigate and utilise technology effectively for communication and learning.

Inspire Confidence and Self-Expression: To create a supportive environment where students feel empowered to articulate their thoughts, opinions, and emotions confidently in English.

SPECIFIC OBJECTIVES AND LEARNING OUTCOMES

Day 1 (15th Jan 2025)

Session 1: Introduction and Interaction with Participants

This opening session aimed to create a welcoming atmosphere and build a positive rapport between participants and facilitators. Activities included introductions and a brief outline of the programme's structure. The facilitators encouraged participants to express their expectations and goals for the programme, fostering a sense of inclusivity. By the end of this session, participants felt comfortable and ready to engage, understanding the collaborative and interactive nature of the training.



Inaugural Session

Session 2: Training programme Details

In this session, facilitators provided an in-depth overview of the programme's framework, breaking down the objectives and content of each session. They highlighted the expected outcomes, how each session would build on the previous one, and the approach to active learning, including group discussions and hands-on activities. Participants gained a clear understanding of the programme's goals, the structure, and what was expected of them, which motivated them to participate actively.

Session 3: Grammar and Vocabulary Strategies by Dr. Sashikanta Barik

This session, led by Dr. Sashikanta Barik, emphasised mastering grammar and expanding vocabulary through practical, research-based strategies. It focused on understanding grammatical structures, learning word roots, synonyms, and antonyms, and applying these skills in real-life contexts such as writing, speaking, and comprehension. The session also highlighted common errors and provided tools for self-correction, ensuring participants developed a strong linguistic foundation for effective communication.

The key components included grammar rules and their application, vocabulary-building techniques, contextual usage and practice, as well as error identification and correction. Participants improved their language proficiency, enhanced their communication skills, and increased their confidence in using grammar and vocabulary accurately in both written and spoken contexts.

Session 4: Teaching Poetry, Prose, and Drama by Dr. Braja Kishore Sahoo

This session delved into the unique characteristics, structures, and techniques of poetry, prose, and drama, helping participants differentiate and appreciate each form. Through examples and interactive activities, learners explored how these forms convey meaning and evoke emotions. The key components of poetry included rhythm, metre, rhyme, imagery, and figurative language. Prose was characterised by narrative structure, character development, themes, and descriptive language. Drama consisted of dialogue, stage directions, plot, conflict, and character interaction. By the end of the session, participants were able to identify, compare, and analyse the key elements of poetry, prose, and drama, fostering a deeper appreciation for literature and its diverse expressions.

Session 5: Note-Making, Summarising, and Data Interpretation by Dr. Tapan Kumar Panda and Mr. Subham Nath

This session was designed to help learners master the art of effective note-making, concise summarising, and accurate data interpretation. Through practical exercises and examples, participants learnt how to organise information, extract key points, and analyse data for better comprehension and presentation. The key components included note-making, which involved techniques for organising and condensing information; summarising, which focused on extracting key points and presenting them concisely; and data interpretation, which entailed analysing and drawing insights from charts, graphs, and tables. By the end of the session, participants were able to create well-structured notes, write clear and concise summaries, and interpret data from various sources, enhancing their ability to process and communicate information effectively in academic and professional settings.



Session on Data Interpretation, Note-making and Summarizing by Mr. Shubham Nath

Day 2 (16th Jan 2025)

Session 6: Use of AI in the English Language by Dr. Prajna Pani

This session explored the transformative role of Artificial Intelligence (AI) in enhancing English language skills, including reading, writing, speaking, and listening. It highlighted AI-powered tools, applications, and methodologies that facilitate personalised learning, error detection, and language proficiency improvement. The key components of AI-driven language learning included grammar checkers, vocabulary enhancers, and pronunciation guides, along with personalised learning through adaptive platforms tailored to individual needs. Additionally, AI enabled automated assessment of writing and speaking tasks while providing interactive practice through chatbots and virtual assistants for real-time language engagement. Participants gained insights into how AI can revolutionise English language learning and teaching. They learnt to utilise AI tools effectively to improve language skills, provide personalised feedback, and create engaging learning experiences, making language acquisition more efficient and accessible.

Day 3 (17th Jan 2025)

Session 7: CELTS by All Faculty of the English Department

This session, led by the English Department faculty, focused on holistic English language development, covering reading, writing, speaking, and listening skills. It integrated innovative teaching methodologies and practical activities to enhance language proficiency and communication competence. The key components included developing reading skills through techniques for comprehension and critical analysis, enhancing writing skills with structured approaches to essays, reports, and creative writing, improving speaking skills through public speaking, pronunciation, and fluency exercises, and strengthening listening skills with active listening and note-taking strategies. Additionally, interactive activities such as group discussions, role-plays, and language games fostered engagement and practical language application. Participants developed a well-rounded mastery of English language skills, enabling them to communicate effectively in academic, professional, and social contexts. They gained confidence and competence through practical application and collaborative learning.



Use of AI in Language by Dr. Prajna Pani

Session 8: Strategies for Teaching Comprehension by Dr. Subrat Samal

This session, led by Dr. Subrat Samal, focused on innovative and research-based strategies to enhance students' reading comprehension skills. It covered techniques to help learners understand, analyse, and interpret texts effectively while fostering critical thinking and engagement. Effective reading instruction involved several key components: pre-reading strategies helped activate prior knowledge and set a purpose for reading; during-reading strategies, such as annotating, questioning, and visualising, aided comprehension; post-reading strategies, including summarising, discussing, and reflecting, reinforced understanding. Scaffolding techniques ensured differentiated instruction to support diverse learners. Additionally, the use of technology enhanced comprehension and engagement through digital tools. Participants gained practical strategies to improve students' reading comprehension, enabling them to decode complex texts, think critically, and engage deeply with content. This session empowered educators to create inclusive and effective reading instruction tailored to diverse learning needs.

Session 9: Sign Language and Communicative English by Prof. Madhusmita Pattnaik

This session, led by Prof. Madhusmita Pattnaik, explored the intersection of sign language and communicative English to promote inclusive and effective communication. It highlighted strategies for bridging language barriers and fostering understanding between hearing and non-hearing individuals. The programme covered the basics of sign language, introducing common signs and gestures. It also focused on communicative English techniques to enhance both spoken and written English skills. Integration strategies were emphasised to combine sign language and English for more inclusive communication. Practical applications, such as role-playing and real-life scenarios, helped participants practise effectively. Additionally, the programme promoted awareness and sensitivity to foster empathy and inclusivity in communication. Participants gained foundational knowledge of sign language and communicative English, enabling them to interact effectively with diverse audiences. They developed skills to create inclusive environments and foster meaningful communication, breaking down barriers between hearing and non-hearing individuals.



Session on Sign Language by Ms. Madhusmita Pattnaik

Session 10: Professional Ethics by K.V.D. Prakash, Dean (HRD)

This session, led by K.V.D. Prakash, Dean (HRD), focused on the principles and practices of professional ethics, emphasising their importance in building trust, integrity, and accountability in the workplace. It explored ethical dilemmas, decision-making frameworks, and the role of ethics in professional growth. The key components of ethics included core principles such as integrity, honesty, accountability, and respect. Ethical decision-making involved applying frameworks to resolve dilemmas effectively. Case studies provided real-world examples of ethical challenges and their solutions. Workplace ethics focused on fostering a culture of trust and responsibility. Lastly, personal and professional growth was achieved by aligning individual values with professional conduct. Participants developed a strong understanding of professional ethics, enabling them to navigate ethical challenges with confidence. They learnt to apply ethical principles in their work, fostering a culture of integrity and accountability in their professional environments.

Day 4 (18th Jan 2025)

Session 11: Linguistics and Phonetics by Dr. Debashish Mahapatra

This session, led by Dr. Debashish Mahapatra, focused on the fundamental concepts of linguistics and phonetics, examining the structure, sounds, and mechanics of language. It provided insights into how language functions and evolves, with a focus on practical applications in language teaching and learning. The key components of linguistics included an understanding of linguistic basics such as phonology, morphology, syntax, semantics, and pragmatics. It also covered phonetics, focusing on speech sounds, articulation, and the International Phonetic Alphabet (IPA). Additionally, language variation was explored through the study of dialects, accents, and sociolinguistics. Applied linguistics encompassed language acquisition, teaching methodologies, and computational linguistics. Furthermore, practical exercises such as phonetic transcription and linguistic analysis enhanced hands-on learning. Participants gained a foundational understanding of linguistics and phonetics, enabling them to analyse language structures and sounds effectively. They applied this knowledge to improve language teaching, learning, and communication strategies, fostering a deeper appreciation for the science of language.

Session 12: Critical Thinking through Literature by Dr. Chandrabhanu Pattanayak

This session, led by Dr. Chandrabhanu Pattanayak, explored how literature can be used as a tool to foster critical thinking skills. Participants analysed literary texts to uncover deeper meanings, question assumptions, and develop reasoned interpretations, enhancing their analytical and evaluative abilities. The key components of literary analysis included close reading of texts to identify themes, symbols, and narratives; challenging assumptions by exploring multiple perspectives; building logical arguments supported by textual evidence; examining connections between different texts and contexts through comparative analysis; and fostering creative engagement by encouraging original insights and personal responses to literature. Participants enhanced their critical thinking skills by engaging deeply with literary texts. They learnt to analyse, interpret, and evaluate literature thoughtfully, fostering intellectual curiosity and the ability to approach complex ideas with clarity and confidence.

Session 13: Grammar and Vocabulary II by Dr. Kalikinkar Pattnaik

This session, led by Dr. Kalikinkar Pattnaik, focused on refining advanced grammar structures and expanding vocabulary to enhance language proficiency. Participants explored complex grammatical concepts and learnt strategies to build a robust vocabulary for effective communication. The key components included advanced grammar, covering complex sentence structures, tenses, and grammatical nuances; vocabulary expansion, focusing on word roots, prefixes, suffixes, and context-based usage; error analysis, involving identifying and correcting common grammatical mistakes; practical application, incorporating exercises and activities to reinforce learning; and language fluency, emphasising techniques for using grammar and vocabulary confidently in both speaking and writing. Participants gained a deeper understanding of advanced grammar and vocabulary, enabling them to communicate more accurately and fluently. They developed the skills to construct complex sentences, avoid common errors, and express themselves with precision and clarity in both written and spoken English.

Session 14: NEP 2020 by Dr. Ajay Kumar Nayak, Pro-VC (Administration)

This session, led by Dr. Ajay Kumar Nayak, Pro-VC (Administration), provided an in-depth analysis of the National Education Policy 2020, highlighting its key features, objectives, and the transformative changes it brings to the Indian education system. It also explored the implications for educators, students, and institutions. The National Education Policy (NEP) 2020 emphasises multidisciplinary education, flexibility, and holistic development. In school education, it introduces reforms such as foundational literacy, experiential learning, and curriculum restructuring. Higher education undergoes significant changes with the establishment of multidisciplinary universities, credit-based systems, and a stronger focus on research. Additionally, the policy integrates vocational education and promotes lifelong learning to enhance skill development. However, its implementation faces challenges, including issues related to infrastructure, teacher training, and ensuring equity in education. Participants gained a comprehensive understanding of NEP 2020 and its vision for transforming education in India. They were equipped to align their teaching practices with the policy's goals, fostering a more inclusive, flexible, and skill-oriented educational environment.



**Session on NEP 2020 by Dr Ajay Kumar
Nayak, Pro-VC (Administration)**

Day 5 (19th Jan 2025)

Session 15: Digital Tools for English Teaching by Dr. Rabindra Pradhan

This session, led by Dr. Rabindra Pradhan, explored the use of digital tools and technologies to enhance English language teaching. Participants learnt how to leverage online platforms, apps, and resources to create engaging, interactive, and effective learning experiences for students. Key components of technology-enhanced English language instruction included digital platforms such as Learning Management Systems (LMS) and virtual classrooms, along with interactive tools like quizzes, polls, and gamified learning apps. Multimedia resources, including videos, podcasts, and e-books, supported language learning, while collaboration tools such as online forums, discussion boards, and group projects facilitated engagement. Additionally, assessment tools, including digital grading, feedback mechanisms, and progress tracking, enhanced the evaluation process. Participants gained practical knowledge of digital tools and strategies to enhance English language teaching. They were able to create dynamic, student-centred lessons, foster collaboration, and assess learning effectively using technology, making the teaching process more engaging and impactful.

Session 16: Case Study Analysis by Ms. Arpita Das

This session, led by Ms. Arpita Das, focused on developing skills to analyse and interpret case studies effectively. Participants learnt systematic approaches to dissect complex scenarios, identify key issues, and propose well-reasoned solutions, enhancing their critical thinking and problem-solving abilities. The key components of a case study framework included understanding its structure, context, and objectives. Analytical techniques involved identifying problems, stakeholders, and underlying factors. Solution development required brainstorming, evaluating alternatives, and recommending actions. Effective presentation skills were essential for communicating findings clearly and persuasively. Finally, real-world applications involved practising with diverse case studies from various fields. Participants gained the ability to analyse case studies systematically, think critically, and propose actionable solutions. They developed confidence in presenting their findings and applying these skills to real-world challenges, making them effective problem-solvers in academic and professional settings.

Session 17: Valedictory Function

This session marked the end of the programme, celebrating the accomplishments of participants and reflecting on their learning journey. It included speeches, awards, and motivational messages to inspire continued growth and success. Participants felt a sense of accomplishment and motivation as they celebrated their achievements. The ceremony provided closure to the programme while inspiring them to apply their learning and strive for future success in their personal and professional endeavours.

Special Session

The Power of Language and Communication

Speaker: Prof. (Dr.) Mukti Kanta Mishra (President, CUTM)

An interactive session was conducted to explore the significance of the English language in academic and professional growth. The speaker shared insights into the evolution of language learning, emphasising the importance of effective communication skills in today's world. The session covered key aspects such as improving vocabulary, mastering grammar, and developing confidence in speaking and writing. Practical strategies for enhancing comprehension and articulation were discussed, helping participants overcome language barriers. Through engaging discussions and real-life examples, the session motivated participants to refine their linguistic abilities, highlighting the role of English as a bridge to global opportunities.



Participants with Prof. (Dr.) Mukti Kanta Mishra (President, CUTM)

Campus Tour

A campus tour of various production units at Centurion University was conducted. This tour was designed to provide participants with insights into the university's diverse and innovative units focused on technology, sustainability, and vocational education. The session spanned from 2:30 pm to 5:00 pm and covered a range of topics, including renewable energy, sustainable practices, paramedic education, and cutting-edge technologies. The following report outlines the key highlights and learning outcomes from each session.

Tour Schedule and Learning Outcomes

2:30 pm – 2:45 pm: CDC, Transformer, Waste to Wealth, WELL

The first stop of the tour included the CDC (Career Development Centre), the Transformer unit, the Waste to Wealth initiative, and WELL (Water, Energy, and Livelihood).

2:45 pm – 3:15 pm: School of Paramedics/Law

A visit to the School of Paramedics and the School of Law provided insights into the educational approaches and technologies used in these disciplines.

3:15 pm – 3:30 pm: Renewable Energy

This session focused on renewable energy solutions implemented at Centurion University, highlighting the role of solar, wind, and other renewable sources in the university's sustainability efforts.

3:30 pm – 3:45 pm: Apparel COE

The Apparel Centre of Excellence (COE) presented innovations in the textile and apparel industry. Participants were shown the latest advancements in fabric production, garment design, and manufacturing techniques. They also explored how the COE fosters skill development in textile production and fashion design, preparing students for the competitive apparel industry.

3:45 pm – 4:00 pm: Experience Centre

The Experience Centre showcased various products being manufactured at the university.

4:00 pm – 4:15 pm: ASDC ITI/ITOT/Ashok Leyland/Hyundai, Yamaha

This session highlighted the collaboration between the Automotive Skills Development Council (ASDC) and industry leaders such as Ashok Leyland, Hyundai, and Yamaha. Participants observed the advanced training programmes offered through these collaborations, covering everything from automotive mechanics to customer service. The session emphasised the importance of industry-academia partnerships in developing skilled professionals for the automotive sector.

4:15 pm – 4:30 pm: Future Nexus, AR/VR

Future Nexus, an advanced research unit, introduced participants to the future of AR/VR applications. Participants learnt about the latest trends in AR/VR technologies, including their use in virtual simulations, remote collaboration, and immersive learning. They were shown how these technologies are shaping the future of education and industry applications.

4:30 pm – 4:45 pm: EV, CNC, 3D Printing

This session introduced participants to innovations in electric vehicles (EVs), computer numerical control (CNC) machining, and 3D printing technologies.

4:45 pm – 5:00 pm: School of Maritime

The final stop was the School of Maritime, where participants learnt about the programmes and facilities related to maritime studies and shipbuilding. Participants were introduced to cutting-edge technology used in the maritime industry, including ship design, navigation, and sustainable practices for marine resource management. The session emphasised the growing importance of maritime education in global trade and environmental conservation.



Participants visited the Experience Centre

Conclusion

The English training programme at Centurion University has successfully provided participants with a comprehensive and practical understanding of language learning, communication skills, and modern teaching methodologies. Over several days, participants engaged with innovative pedagogical approaches, interactive learning techniques, and real-world applications that bridge the gap between theory and practice. From exploring the National Education Policy 2020 and its emphasis on language proficiency to delving into advanced linguistics, literature, and digital communication strategies, participants gained valuable insights into the evolving landscape of English education. Additionally, exposure to interdisciplinary fields such as media studies, creative writing, and technology-enhanced learning demonstrated the vast scope and impact of language education in today's world. The campus tour, including visits to production units such as AR/VR labs, digital content creation centres, and research hubs, further broadened participants' perspectives by showcasing the integration of technology with language learning. These experiences underscored the importance of industry-academia collaborations and the future of communication in an increasingly digital age.



This training programme not only enhanced participants' knowledge but also deepened their appreciation for the role of English in fostering critical thinking, global communication, and interdisciplinary learning. It has prepared them to apply these insights in their own academic and professional endeavours, contributing meaningfully to their respective fields. The programme has been an enriching experience, equipping participants with both theoretical foundations and practical skills. We are confident that the knowledge gained will inspire them to refine their teaching methodologies, research initiatives, and professional interactions. We extend our sincere gratitude to all facilitators, industry partners, and participants for making this programme a success, and we look forward to seeing the positive impact of this learning journey in the future.



Valedictory Ceremony for English Teachers Training programme at CUTM

ANNEXURE-I

Attendance Sheet


COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA


TRAINING PROGRAMME IN ENGLISH
REGISTRATION FORM

Date: January 15-19, 2025

Place: Room No. 18, Aryabhata Building, Centurion University of Technology and Management (CUTM), Ramachandrapur, Jatni, Bhubaneswar, Odisha

Sl. No.	Name	Designation	District	Name of Higher Secondary School	Phone No.	Signature of Participants (Name in Block Letter)
						16.01.2025
1	BIMAL KUMAR PANIGRAHY	LECTURER	Ganjam	BARTINI SCIENCE HIGHER SECONDARY SCHOOL	7008697576	
2	DHANTRI NAYAK	LECTURER	Ganjam	REGIONAL WOMEN'S HIGHER SECONDARY SCHOOL, POLASARA	9957687686	
3	RAMESH CHANDRA MAHANANDA	LECTURER	Jagatsinghpur	SHREE JAGANNATH HIGHER SECONDARY SCHOOL, NAUGAONHAT	9178696170	Ramesh Ch Mahananda
4	ASWATHI K NAIR	LECTURER	Jagatsinghpur	SRI SRI JAGANNATH HIGHER SECONDARY SCHOOL	8606820198	Aswathi Nair
5	SHRABANI PATTANAYAK	LECTURER	Jagatsinghpur	ALAKA HIGHER SECONDARY SCHOOL, ANANTABATA	8594844035	
6	LOKANATH CHHATRIA	PGT	Kalahandi	GOVT HIGHER SECONDARY SCHOOL, NAAGADN, GOLAMUNDA	7008133550	LOKANATH CHHATRIA
7	AKSHAYA KUNJAR PATTANAIK	LECTURER	Kalahandi	LAKSHMI ADEWAL HIGHER SECONDARY SCHOOL, BEHERA	993303712	Akshaya K. PattanaiK
8	GOPAL CHANDRA PRADHAN	LECTURER	Kalahandi	KASHIRUPADA HIGHER SECONDARY SCHOOL, KASHIRUPADA	9777931754	Gopal chandra Pradhan
9	SHISHIR KUMAR SAHU	LECTURER	Kalahandi	ANCHALINA BASTI-RANI H.S. SCHOOL	9437021747	Shishir Kumar Sahu

10	Bhabani Prasad Biswal	PGT	Kandhamal	Govt.(SSD) Higher Secondary School, Kumbhik, Kandhamal	9936343434	BHABANI PRASAD BISWAL
11	Haman Kumar Dabha	LECTURER	Kandhamal	Adhavi H.S.C., Balligada	6371892920	Haman Kumar Dabha
12	SIBARAM BEHERA	JR LECTURER	Kandhamal	ANCHALIKA HSS SANKARAKHOL	7894383400	SIBARAM BEHERA
13	Chandakant Rout	LECTURER	Kandhamal	Salendra Narayan H.S. School, Rajarkuta	8370368630	
14	SONITA PRADHAN	JR LECTURER	Kandhamal	SUSHREE DEVI WOMEN'S HOS, AUL	7684912323	
15	Madhusmita Naik	PGT	Kandhamal	Korus women's higher secondary school	8763158544	MADHUSMITA NAIK
16	HAREKRUSHNA BARIK	LECTURER	Kandhamal	BLU PATTANAIK HIGHER SECONDARY SCHOOL, ANTEL, KENDRAPARA	9439619893	HAREKRUSHNA BARIK
17	Dr. Sakti Sekhar Dash	LECTURER	Kandhamal	Tulasi Women's Higher Secondary School	8480049093	SAKTI SEKHAR DASH
18	LIPSA MAHANKUDA	PGT	Khordha	RAMADEVI WOMEN'S HOS, BHUBANESWAR	778888756	Lipsa Mahankuda
19	Shyama Prasad Satapathy	LECTURER	Khordha	Rumamani Higher Secondary School	9937142141	
20	Chandan Prasad Jena	LECTURER	Khordha	Nachuni Higher Secondary School	8249125704	
21	Shubhaji Nayak	LECTURER	Khordha	Saipur Higher Secondary School, Saipur	7978043547	SHUBHAJIT NAYAK
22	Swarupantali Bag	LECTURER	Khordha	MANABHINI HIGHER SECONDARY SCHOOL OF NATURAL LAW, BHUBANESWAR	8977447452	SWARUPANTALI BAG
23	Jayashree Das	PGT	Khordha	Janata Higher Secondary School, Kuthub	7094192201	JAYASHREE DAS
24	Mickey Manaswini	LECTURER	Khordha	Godavari Higher secondary school	7898613738	MICKEY MANASWINI

25	SUBHEN DASH	LECTURER	Khordha	Ma Saraswati Women's Higher Secondary School, Titagar, Khordha	6370306705	SUBHEN DASH.
26	Patitapani panda	LECTURER	Khordha	Balugan higher secondary school	6370214442	Patitapani panda
27	DR. DEVISHREE MOHAPATRA	LECTURER	Khordha	PRANANATH HIGHER SECONDARY SCHOOL	9487037158	DEVISHREE MOHAPATRA
28	Abhishek Panda	LECTURER	Khordha	Khetabadi O.A.V. Higher Secondary School	8857705050	ABHISHEK PANDA
29	SUVRA BEHERA	LECTURER	Khordha	Parmananda Higher Secondary School	7205737180	SUVRA BEHERA
30	ANANDA SANKAR PALEI	LECTURER	Khordha	HATTAGOSWAR MAHELA HIGHER SECONDARY SCHOOL, BAGHAMARI	9861269912	
31	Bijay Kumar Das	PGT	Nabarangpur	Govt. Higher secondary school, Borngam	760691431	Bijay Kumar Das
32	Dr. Bikesh Parveen	READER	Cuttack	Tangri Higher Secondary School	9437229142	Bikesh Parveen
33	Dr. Padmalaya Sarangi	LECTURER	Dhenkanal	Jhal Higher Secondary School	7008501781	Padmalaya Sarangi
34	SAGAR PRASAD LENKA	LECTURER	Garjam	BELLAGINTHA WOMEN'S HIGHER SECONDARY SCHOOL, BELLAGINTHA	8895775076	
35	DURYADHAN JENA	LECTURER	Garjam	SCIENCE HIGHER SECONDARY SCHOOL, PUDAMARI	9437825885	Duryadhan Jena
36	NRUSENHA CHARAN PATTNAYK	LECTURER	Garjam	KHAMBEYA DOSA SCIENCE HIGHER SECONDARY SCHOOL, POCHILIMA	9937575420	NRUSENHA CHARAN PATTNAYK
37	SURESH KUMAR PATRO	LECTURER	Garjam	KHAMBEYA DOSA SCIENCE HIGHER SECONDARY SCHOOL	9861188807	SURESH KUMAR PATRO
38	SRI NARENDRA KUMAR PATRA	LECTURER	Garjam	BALUDEBA SETHY SCIENCE HS SCHOOL, BHATAKUMARADA	9688660000	Narendra Kumar Patra
39	Radhamaadhab Pradhan	LECTURER	Garjam	J.K. Women's H.S. School	8877440258	RADHA MADHAB PRADHAN

40	SANTOSH KUMAR PANDA	LECTURER	Jagatsinghpur	BALIKUDA HS SCHOOL	9537335452	Santosh Kumar Panda
41	SOUCAT KUMAR SAHU	LECTURER	Jagatsinghpur	BALIKUDA WOMEN'S HIGHER SECONDARY SCHOOL, BALIKUDA	0777347987	Soucat Kumar Sahu
42	ASHOK KUMAR SAHOO	JR LECTURER	Kalahandi	CHICHAGUDA HIGHER SECONDARY SCHOOL	8249298225	Ashok Kumar Sahoo
43	Pravakar Das	LECTURER	Kandhama	H.N.S Higher Secondary School	9537177850	Pravakar Das
44	Dilip Kumar Sahoo	LECTURER	Kandhama	Jaganath Higher secondary school, Sukra	8249052088	
45	BIDHU PRASAD SAHOO	LECTURER	Khordha	AMBEDKAR CENTENARY HSB OF EDUCATION & TECHNOLOGY, SUBULAKA, BHUBANESWAR, 751019	9537198689	Bidhu Prasad Sahoo
46	UTPAL KUMAR PRADHAN	LECTURER	Khordha	SANKARAN HANICHANDAN HIGHER SECONDARY SCHOOL	9861035492	Uttal K. Pradhan
47	Anupama Champatiroy	LECTURER	Khordha	St. Jagannath Higher Secondary School, Kapatal	7008392328	
48	SHANKAR KUMAR NALLA	LECTURER	Nabarangpur	JHARIGAM HIGHER SECONDARY SCHOOL	9556908460	
49	DHIRENDRA KUMAR MAHARANA	LECTURER	Nayagam	K.P.D. WOMEN'S HIGHER SECONDARY SCHOOL, DASPALLA	7873979292	Dhirendra Kumar Maharana
50	BIRANCHI KUMAR MAHARANA	LECTURER	Nayagam	WOMEN'S HIGHER SECONDARY SCHOOL, KHANDAPADA	9937008363	Biranchi Kumar Maharana
51	BALLOCHAN NAIK Lecturer, Kalahandi		Kalahandi	Kaung Mahantika, Lalpur	9965616421	Balochan Naik
52	SUBHASH MELEKA Lecturer, Khordha		Khordha	Begunia College, Begunia	783943 31185	Subhash Meleka
53	Soumya Suman Sahoo Lecturer, Kandhama		Kandhama	Neelamadhab Mahavidyalaya	9861184560	Soumya Suman Sahoo

54 S. SWARNALATA NAYAK, Lecturer, Kandhama, 8260557148, Jayak N.S.B. Higher Secondary School, Temudibandha

ANNEXURE-II

Feedback Reports

SCHOOL OF MANAGEMENT
DEPARTMENT OF ENGLISH
LEARNING RECORD

NAME- DR. SASMITA KUMARI SAHU
LECTURER IN ENGLISH
SCIENCE COLLEGE, KONKORADA

TOPIC - USING AI in English Teaching

On one of the sessions ^{chaired by Prof. Dr. Pragnan Pratiham which was really insightful.} I learnt about the use of AI in English teaching. The tools demonstrated included chat GPT, crowd, gamma, Grammarly, Quillbot and ~~noted~~ Fillout. In fact, these tools make learning more engaging, ~~interactive~~ and easy getting. The role of AI in education cater to diverse needs. It assists in creative writing and text summarization. While crowd and gamma ~~are~~ are the tools create visually attractive materials. Another tool, Fillout ~~was~~ was presented as an efficient tool for designing and administering quizzes, while Grammarly and Quillbot were emphasized for their personalization features which assist students with grammar correctness, paraphrasing and improving overall writing skills.

In fact, we were taught to use these tools ethically.

Feedback on the class : Use of AI in English Language Learning

The class on the use of AI in English Language Learning was very interesting and engaging.

In today's world of science and technology, AI plays a vital role in the process of learning English language. It helps the learners enhance the ability of learning, creativity and communicative skill in English. It also helps them how to write a passage without having any grammatical errors; enhancing stock of vocabulary and writing a passage coherently. Moreover, the use of AI tools in the process of learning English language is helpful to the learners a lot. These tools can solve real-world learning problems and enhance creative thinking of the learners.

The class on the use of AI in English Language Learning was very interactive session between learners and teachers who supported to develop in us the potentiality and proficiency in textual contexts. Overall, the class was well-structured and provided a clear understanding of the usages of AI tools in English Language Learning. Basically, we the learners were able to follow certain rules and regulations of grammar by using AI tools in practical fields and got scope empowering our abilities how to teach our students in classroom and support them enhance their knowledge in future.

Submitted by

Biswanchi Kumar Maharana
Women's Higher Secondary School
Khandapada

Mo- 9937008363

Dt 26.12.24

Opinion on the Training Programme

First of all I admire the noble attempt of the CHSE for conducting a training programme of English Teachers at Centurion University of Technology and Management for five days. The co-operation of the employees of this university is worth praising. The master Trainers have tried their best to impart the knowledge and experiences they have ~~gained~~ gained from the nation and abroad. I think it will enrich their careers and personality but I am in doubt how it would ~~be~~ be useful to the students learning in rural based secondary schools where there is less least attendance.

While attending the workshop I was very mindful and noting down the very important and main points. Finally I regret to say that some participants like me were asked to join the programme on the third day. The Council authority in charge of arrangement may look into it.

However the programme ~~is~~ has been ~~very~~ successful and ~~is~~ highly commendable.

Satyajit Saha
Ret - in - English
I - G. Women's H. S. School
NIMA PADA

ANNEXURE-III

SDG Reports

Nandita Surle - Kishorenagar College

Sustainability, described as center of the 16 goals of SDGs, indicates peace and prosperity of the people and planet, while tackling climate change and environment. The SDGs set by the United Nations, serves the benchmark for policy makers to identify gaps and prioritise actions towards achieving the goal of sustainable development by 2030. At the national level SDG India measures national progress on the line of above 16 SDGs by framing 113 indicators, aligned with National Indicator Framework. So

The ^{score of} index which ranges from 0-100, is an indication of progress, with higher score reflecting front-runner and achiever. In the field of inclusive growth and development. In a way it also promotes competitive and cooperative federalism, encouraging states and UTs to learn from each other and close outcome based gaps. As a barometer for measuring progress these indicators has to be also based on local issues, communities and stakeholders to promote institutional ownership, collaborative competition, capacity building and social inclusion approach. Odisha with a score of 58 out of 100 (S.K. Mallick et al 2024) was ranked as a performer state among 16 states. due to its various initiatives done so far on the line of development, and inclusive growth.

Assignment-1

However the state is lagging behind in many categories. Such as Zero Hunger which needs to be addressed at the local level. The nature of SDG goals call for participation at Public, Pvt and local level, which warrants participation of state level institutions to acquire the Centre stage.


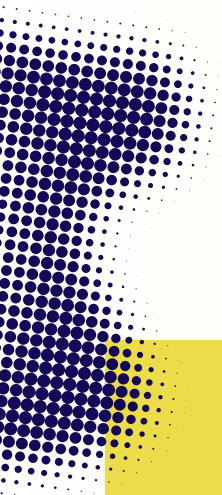
While at the government level the policy has to be framed to achieve better indicators with local participation through PPP mode ~~and~~ in a sustainable manner.

Among all such institutions, one of the private institution acknowledged by govt is Centurion university. Which focuses on sustainable and inclusive development by sensitising the local and down-trodden population.

The education system imbibed in the curriculum promotes skill and employment opportunities, which is (SDG 4) of the 16 indicators. The university is also promoting green energy which is part of (SDG-7). The Sky rider, startup and FRP section is also promoting above with (SDG 8) and (SDG 9) which is development of industry innovation and infrastructure. The apparel unit and experience Centre showcases SDG 10, 11 and 12 which is the main idea behind inclusive growth and reduction of inequality of SDG. The waste to utility Center is promoting (SDG 12) by focusing on circular economy. The renewable energy unit is promoting climate action (SDG-13) and promotes climate resilience. The Furniture, and CCC section is also promoting gainful employment along with it's grant/awards Programme.

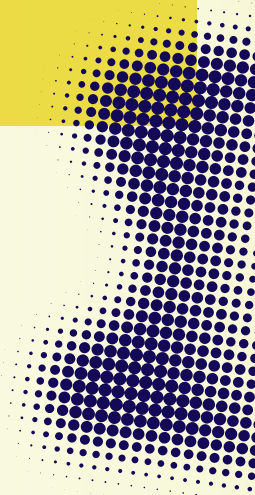
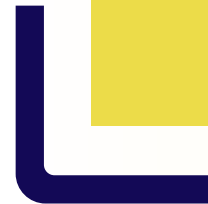
Session Plan

Date	9:30 - 11:00 AM	11:00 - 11:30 AM	11:30 - 1:00 PM	1:00 - 1:45 PM	2:00 - 3:15 PM	3:30 - 5:00 PM
15-01-2025 (Wednesday)	Inaugural Session by Guest	TEA TIME	Grammar and Vocabulary Strategies (Dr. Sashikant Barik)	LUNCH	Teaching Poetry, Prose, and Drama (Dr. Braja Kishore Sahoo)	Note Making, Summarizing, Data Interpretation (Dr. T.K. Panda / Mr. Shubham Nath)
16-01-2025 (Thursday)	Campus Tour (Arpit Swain/ Nirlipta Pattnaik/ Shilpi Nayak)				Use of AI in the English Language (Dr. Prajna Pani)	
17-01-2025 (Friday)	CELTS (All Faculty of English Department)	TEA TIME	Strategies for Teaching Comprehension (Dr. Subrat Samal)		Sign Language and Communicative English (Prof. Madhusmita Pattnaik)	Professional Ethics (Prof. K.V.D Prakash)
18-01-2025 (Saturday)	Linguistics and Phonetics (Dr. Debashish Mahapatra)	TEA TIME	Critical Thinking through Literature (Dr. Chandrabhanu Pattanayak)		Grammar and Vocabulary II (Dr. Kalikinkar Pattanaik)	NEP 2020 (Dr. Ajay Kumar Nayak)
19-01-2025 (Sunday)	Digital Tools for English Teaching (Dr. Rabindra Pradhan)	TEA TIME	Case Study Analysis (Ms. Arpita Das)		Valedictory Session	



SNIPPET ON

**TEACHERS TRAINING PROGRAMME
FOR ECONOMICS TEACHERS
SPONSORED BY COUNCIL OF HIGHER
SECONDARY EDUCATION (CHSE)
GOVT. OF ODISHA, INDIA**



Facilitators and Presenters

SL. NO.	NAME	POSITION	SUBJECT
1.	PROF. (DR.) MUKTI KANTA MISHRA	(PRESIDENT, CUTM)	ECONOMICS, SUSTAINABILITY, AND THE CENTURION UNIVERSITY ECOSYSTEM
2.	DR. MADHUSMITA DASH	PROFESSOR	PRINCIPLES OF ECONOMICS
3.	DR. RABINARAYAN PATRA	PROFESSOR	CHALLENGES FACED BY INDIAN ECONOMY, CHALLENGES FACED BY INDIAN ECONOMY
4.	DR. SUSANTA KUMAR DAS	PROFESSOR	CONCEPT OF ECONOMICS
5.	DR. SIBAPRASAD SAMAL	PROFESSOR	NATIONAL INCOME
6.	PROF. SATYAKAN MISHRA	PROFESSOR	INTRODUCTORY MICROECONOMICS
7.	DR. GIRIJA NANDINI	PROFESSOR	INVESTMENT ANALYSIS
8.	DR. RONISMITA MISHRA	PROFESSOR	POST-COVID ECONOMIC CHALLENGES AND DEVELOPING ACTION PLAN
9.	PROF. KVD PRAKASH	PROFESSOR	SESSION ON ETHICS
10.	PROF. PRAMOD PATJOSHI	PROFESSOR	INDIAN FINANCIAL SYSTEM
11.	DR. PRADIP KUMAR SAHU	PROFESSOR	SECTORAL DEVELOPMENT - FOCUSING ON AGRICULTURE
12.	DR. ANSHUMAN JENA	PROFESSOR	USE OF ICT AND AI IN TEACHING LEARNING
13.	DR. AJAYAKUMAR NAYAK	PROFESSOR	NEP 2020
14.	DR. DUKHABANDHU	PROFESSOR	MONEY BANKING AND PUBLIC FINANCE
15.	DR. SANJEET KU. MOHAPATRA	PROFESSOR	OVERVIEW OF INDIAN ECONOMY
16.	PROF. SANJEEV MISHRA	PROFESSOR	ENTREPRENEURSHIP AND ECONOMIC DEVELOPMENT

Name of Attendees

SL. NO.	NAME	POSITION	SCHOOL
1	BIMAL KUMAR PANIGRAHY	LECTURER	BARTINI SCIENCE HIGHER SECONDARY SCHOOL
2	DHANITRI NAYAK	LECTURER	REGIONAL WOMEN'S HIGHER SECONDARY SCHOOL, POLASARA
3	RAMESH CHANDRA MAHANANDA	LECTURER	SHREE JAGANNATH HIGHER SECONDARY SCHOOL, NAUGAONHAT
4	ASWATHI K NAIR	LECTURER	SRI SRI JAGANNATH HIGHER SECONDARY SCHOOL
5	SHRABANI PATTANAYAK	LECTURER	ALAKA HIGHER SECONDARY SCHOOL, ANANTABATA
6	LOKANATH CHHATRIA	LECTURER	GOVT HIGHER SECONDARY SCHOOL NUAGAON, GOLAMUNDA
7	AKSHAYA KUMAR PATTANAIK	LECTURER	LAKHIRAM AGRAWAL HIGHER SECONDARY SCHOOL, BEHERA
8	GOPAL CHANDRA PRADHAN	LECTURER	KASHRUPADA HIGHER SECONDARY SCHOOL KASHRUPADA
9	SHISHIR KUMAR SAHU	LECTURER	ANCHALIKA BASTARANI H S SCHOOL
10	BHABANI PRASAD BISWAL	LECTURER	GOVT. (SSD) HIGHER SECONDARY SCHOOL, KUDUTULI, KANDHAMAL
11	HAMAN KUMAR DIBAKA	LECTURER	ADIVASI HSC, BALLIGUDA
12	SIBARAM BEHERA	LECTURER	ANCHALIKA HSS SANKARAKHOL
13	CHANDRAKANT ROUT	LECTURER	SAILENDRA NARAYAN H.S. SCHOOL, RAJANIKA
14	SONITA PRADHAN	LECTURER	SUSHREE DEVI WOMEN'S HSS, AUL
15	MADHUSMITA NAIK	LECTURER	KORUA WOMEN'S HIGHER SECONDARY SCHOOL
16	HAREKRUSHNA BARIK	LECTURER	BIJU PATTANAIK HIGHER SECONDARY SCHOOL, ANTEI, KENDRAPARA
17	DR. SAKTI SEKHAR DASH	LECTURER	TULASI WOMEN'S HIGHER SECONDARY SCHOOL
18	LIPSA MAHANKUDA	LECTURER	RAMADEVI WOMEN'S HSS, BHUBANESWAR
19	SHYAMAA PRASAD SATAPATHY	LECTURER	RAMAMANI HIGHER SECONDARY SCHOOL
20	CHANDAN PRASAD JENA	LECTURER	NACHUNI HIGHER SECONDARY SCHOOL
21	SHUBHAJIT NAYAK	LECTURER	SALIPUR HIGHER SECONDARY SCHOOL, SALIPUR
22	SWARUPANJALI BAG	LECTURER	MAHARISHI HIGHER SECONDARY SCHOOL OF NATURAL LAW, BHUBANESWAR

23	JAYASHREE DAS	LECTURER	JANATA HIGHER SECONDARY SCHOOL, KUHUDI
24	MICKEY MANASWINI	LECTURER	GODAVARIS HIGHER SECONDARY SCHOOL
25	SUBHEN DASH	LECTURER	MAA SARADA WOMEN'S HIGHER SECONDARY SCHOOL, TIKATAL, KHORDHA
26	PATITAPABAN PANDA	LECTURER	BALUGAON HIGHER SECONDARY SCHOOL
27	DR. DEVISHREE MOHAPATRA	LECTURER	PRANANATH HIGHER SECONDARY SCHOOL
28	ABHISEK PANDA	LECTURER	KSHETRABASI D.A.V. HIGHER SECONDARY SCHOOL
29	SUVRA BEHERA	LECTURER	PARAMANANDA HIGHER SECONDARY SCHOOL
30	ANANDA SANKAR PALEI	LECTURER	HATTAKESWAR MAHILA HIGHER SECONDARY SCHOOL, BAGHAMARI
31	BIJAY KUMAR DAS	LECTURER	GOVT. HIGHER SECONDARY SCHOOL, BORIGAM
32	DR. BILKESH PARVEEN	LECTURER	TANGI HIGHER SECONDARY SCHOOL
33	DR. PADMALAYA SARANGI	LECTURER	JIRAL HIGHER SECONDARY SCHOOL
34	SAGAR PRASAD LENKA	LECTURER	BELLAGUNTHA WOMEN'S HIGHER SECONDARY SCHOOL BELLAGUNTHA
35	DURYADHAN JENA	LECTURER	SCIENCE HIGHER SECONDARY SCHOOL PUDAMARI
36	NRUSINHA CHARAN PATTNAIK	LECTURER	KHAMBEYA DORA SCIENCE HIGHER SECONDARY SCHOOL, POCHILIMA
37	SURESH KUMAR PATRO	LECTURER	KHAMBEYA DORA SCIENCE HIGHER SECONDARY SCHOOL
38	SRI NARENDRA KUMAR PATRA	LECTURER	BASUDEBA SETHY SCIENCE HS SCHOOL, BHATAKUMARADA
39	RADHAMADHAB PRADHAN	LECTURER	PK WOMEN'S H.S.SCHOOL
40	SANTOSH KUMAR PANDA	LECTURER	BALIKUDA HS SCHOOL
41	SOUGAT KUMAR SAHU	LECTURER	BALIKUDA WOMEN'S HIGHER SECONDARY SCHOOL, BALIKUDA
42	ASHOK KUMAR SAHOO	LECTURER	CHICHAIGUDA HIGHER SECONDARY SCHOOL
43	PRAVAKAR DAS	LECTURER	H.N.S. HIGHER SECONDARY SCHOOL
44	DILLIP KUMAR SAHOO	LECTURER	LOKANATH HIGHER SECONDARY SCHOOL, PATKURA
45	BIDHU PRASAD SAHOO	LECTURER	AMBEDKAR CENTENARY HSS OF EDUCATION & TECHNOLOGY DUMUDUMA, BHUBANESWAR.751019
46	UTPAL KUMAR PRADHAN	LECTURER	SANATAN HARICHANDAN HIGHER SECONDARY SCHOOL
47	ANUPAMA CHAMPATTIRAY	LECTURER	SRI JAGANNATH HIGHER SECONDARY SCHOOL, KAIPADAR
48	SHANKAR KUMAR NALLA	LECTURER	JHARIGAM HIGHER SECONDARY SCHOOL
49	DHIRENDRA KUMAR MAHARANA	LECTURER	K.P.D. WOMEN'S HIGHER SECONDARY SCHOOL, DASPALLA
50	BIRANCHI KUMAR MAHARANA	LECTURER	WOMEN'S HIGHER SECONDARY SCHOOL, KHANDAPADA

Introduction

The Economics Training programme, held from 20th to 24th January 2025 at Centurion University of Technology and Management, was a structured initiative to enhance the teaching methodologies and domain knowledge of Economics educators under CHSE. This intensive five-day programme was designed to equip educators with advanced economic theories, policy insights, research methodologies, and innovative pedagogical approaches. By incorporating a variety of learning formats, including expert lectures, hands-on sessions, case studies, and group discussions, the programme sought to: Improve educators' understanding of contemporary economic challenges and their global implications. Enhance teaching methodologies through digital integration and case-based learning. Foster an interactive platform for idea-sharing and collaboration among educators. Strengthen analytical and decision-making capabilities in economic policy and financial planning.

This programme emphasised the practical applications of economic theories, aligning teaching methods with NEP 2020 guidelines and integrating technology into Economics education.

Broad Objectives

The Economics Training programme was designed with the following key objectives:

- To provide a comprehensive understanding of core economic principles and their practical applications.
- To introduce participants to contemporary economic challenges, including globalisation, inflation, and fiscal policies.
- To encourage the use of modern technological tools in teaching Economics.
- To integrate interdisciplinary learning in line with NEP 2020 guidelines.
- To develop critical thinking and problem-solving skills in economic decision-making.

SPECIFIC OBJECTIVES AND LEARNING OUTCOMES SESSION-WISE

Day 1: 20th January 2025

Session 1: Welcome and Introduction

This session focused on orientation, self-introduction, and expectation setting. Participants familiarised themselves with the programme structure and objectives, setting the foundation for effective engagement. They were introduced to key themes of the training and had the opportunity to network with fellow educators and experts.



Inaugural Session for Economics Teachers Training programme

Session 2: Principles of Economics by Dr. Madhusmita Dash

This session featured a discussion on fundamental economic principles and their real-life applications. Participants explored supply-demand mechanisms, market structures, and real-world economic examples, enhancing their ability to explain these concepts effectively to students.

Session 3: Challenges Faced by the Indian Economy by Dr. Rabinarayan Patra

This session concentrated on case studies addressing economic growth, inflation, and policy frameworks. Participants analysed key economic challenges in India, including employment issues, inflation, and fiscal deficit, and discussed potential solutions through government policies.



Session on Indian Economy by Dr. Rabinarayan Patra

Session 4: Investment Analysis by Dr. Girija Nandini

This session featured hands-on financial modelling exercises. Participants enhanced their understanding of investment decision-making, risk assessment, and portfolio management through real-life financial investment strategies.

Day 2: 21st January 2025

Session 5: Challenges Faced by the Indian Economy by Dr. Rabinarayan Patra

This session included a discussion on policy analysis and fiscal management strategies. Participants explored the economic policy-making process and its impact on economic stability through discussions on monetary and fiscal policies.

Session 6: Concept of Economics by Dr. Sustanta Kumar Das

This session involved an interactive discussion on microeconomics and macroeconomics. Participants strengthened their foundational understanding of economic systems, including consumer behaviour, demand-supply interactions, and GDP growth.

Session 7: National Income by Dr. Sibaprasad Samal

This session focused on GDP measurement techniques and data interpretation. Participants developed analytical skills for evaluating national income indicators and their implications for economic policies.

Session 8: Post-COVID Economic Challenges and Developing an Action Plan by Dr. Ronismita Mishra

This session focused on conducting a workshop on policy response strategies. Participants proposed action plans for economic recovery in post-pandemic India, focusing on employment, the digital economy, and financial reforms.

Day 3: 22nd January 2025

Session 9 & 10: Campus Tour by Dr. Ronismita/Mr. Arpit/Mr. Abhinay

During this session, a visit was conducted to various research and innovation centres. Educators gained exposure to economic research applications and university-led innovation projects.



Participants Exploring the Campus

Session 11: Introductory Microeconomics by Prof. Satyakam Mishra

This session featured case-based learning on consumer behaviour. Participants gained insights into consumer decision-making, utility maximisation, and price elasticity concepts.



Session on Microeconomics by Prof. Satyakam Mishra

Session 12: Session on Ethics by Prof. KVD Prakash, Dean HRD

This session explored an ethical framework for economic policies. Participants strengthened their understanding of ethical decision-making in financial management and economic policy-making.

Day 4: 23rd January 2025

Session 13: Indian Financial System by Prof. Pramod Patjoshi

This session provided an overview of banking structures and regulations. Participants acquired knowledge of financial institutions, credit policies, and financial risk management.

Session 14: Sectoral Development - Focusing on Agriculture by Dr. Pradeep Kumar Sahoo

This session discussed a case study on the rural economy and policy implications. Participants gained insights into the role of agriculture in economic growth and rural development strategies.

Session 15: Use of ICT and AI in Teaching-Learning by Dr. Ansuman Jena

This practical session focused on digital learning tools. Participants learnt the application of AI and digital tools in economic education.

Session 16: NEP 2020 by Dr. Ajaya Kumar Nayak, Pro-VC (Administration)

This session addressed policy-driven curriculum design related to NEP 2020. Participants developed curriculum implementation strategies in alignment with NEP 2020.

Day 5: 24th January 2025

Session 17: Money, Banking and Public Finance by Dr. Dukhabandhu

This session centred on a policy debate on monetary and fiscal policies. Participants strengthened their understanding of government financial policies and public sector financing.

Session 18: Overview of the Indian Economy by Dr. Sanjeet Kumar Mohapatra

This session featured an interactive discussion on economic trends. Participants identified key economic growth drivers, including infrastructure development and foreign investments.

Session 19: Entrepreneurship and Economic Development by Dr. Ronismita Mishra

This session focused on the analysis of start-up ecosystems. Participants explored the role of entrepreneurship in driving economic progress.

Session 20: Valedictory Ceremony

In this session, participants received certificates and reflected on their learning experiences.

Special Session

Economics, Sustainability, and the Centurion University Ecosystem

Speaker: Prof. (Dr.) Mukti Kanta Mishra (President, CUTM)

This interactive session explored the evolution of Centurion University, its role in economic sustainability, and the integration of environmental conservation within the academic framework. Prof. (Dr.) Mukti Kanta Mishra delivered an insightful presentation that connected economics with sustainability and institutional ecosystem management. He narrated his journey of establishing Centurion University, highlighting the vision behind creating a multidisciplinary institution with a strong focus on self-sustainability and community-driven development. During the session, the President emphasised the economic significance of environmental conservation within the university. He discussed the extensive biodiversity on campus, which includes a diverse range of tree and shrub species contributing to ecological balance and carbon sequestration. He introduced participants to the concept of Pollinators' Paradise, an initiative aimed at preserving and promoting pollinator species such as bees and butterflies. These species play a crucial role in maintaining agricultural productivity, sustaining local ecosystems, and supporting long-term economic sustainability. Furthermore, the President linked these ecological initiatives to broader economic frameworks, such as green economy models, Sustainable Development Goals (SDGs), and resource-efficient economic practices. He highlighted how Centurion University integrates these principles into its curriculum, ensuring that students and educators understand the importance of economic sustainability in a rapidly changing global landscape. Participants gained valuable insights into how sustainability and economics are interwoven, shaping institutional policies, business models, and environmental conservation efforts.

Campus Tour

A campus tour of various production units at Centurion University was conducted. This tour was designed to provide participants with insights into the university's diverse and innovative units focused on technology, sustainability, and vocational education. The session spanned from 9:30 am to 1:00 pm and covered a range of topics, including renewable energy, sustainable practices, paramedic education, and cutting-edge technologies. The following report outlines the key highlights and learning outcomes from each session.

Tour Schedule and Learning Outcomes

9:30 AM – 9:50 AM: Pollinators' Paradise, CDC, Transformer, Waste to Wealth, WELL

The first stop of the tour included Pollinators' Paradise, the CDC (Career Development Centre), the Transformer unit, the Waste to Wealth initiative, and WELL (Water, Energy, and Livelihood).

9:50 AM – 10:10 AM: School of Paramedics/Law

A visit to the School of Paramedics and the School of Law provided insights into the educational approaches and technologies used in these disciplines.

10:10 AM – 10:30 AM: Renewable Energy

This session focused on renewable energy solutions implemented at Centurion University, highlighting the role of solar, wind, and other renewable sources in the university's sustainability efforts.

10:30 AM – 10:50 AM: Apparel COE

The Apparel Centre of Excellence (COE) presented innovations in the textile and apparel industry. Participants were shown the latest advancements in fabric production, garment design, and manufacturing techniques. They also explored how the COE fosters skill development in textile production and fashion design, preparing students for the competitive apparel industry.

10:50 AM – 11:10 AM: Centurion Experience Centre

The Experience Centre showcased various products being manufactured at the university.

11:10 AM – 11:30 AM: ASDC ITI/ITOT/Ashok Leyland/Hyundai, Yamaha

This session highlighted the collaboration between the Automotive Skills Development Council (ASDC) and industry leaders such as Ashok Leyland, Hyundai, and Yamaha. Participants observed the advanced training programmes offered through these collaborations, covering everything from automotive mechanics to customer service. The session emphasised the importance of industry-academia partnerships in developing skilled professionals for the automotive sector.

11:30 AM – 11:50 AM: Future Nexus, AR/VR

Future Nexus, an advanced research unit, introduced participants to the future of AR/VR applications. Participants learnt about the latest trends in AR/VR technologies, including their use in virtual simulations, remote collaboration, and immersive learning. They were shown how these technologies are shaping the future of education and industry applications.

11:50 AM – 12:10 PM: EV, CNC, 3D Printing

This session introduced participants to innovations in electric vehicles (EVs), computer numerical control (CNC) machining, and 3D printing technologies.

12:10 PM – 1:00 PM: School of Maritime

The final stop was the School of Maritime, where participants learnt about the programmes and facilities related to maritime studies and shipbuilding. Participants were introduced to cutting-edge technology used in the maritime industry, including ship design, navigation, and sustainable practices for marine resource management. The session emphasised the growing importance of maritime education in global trade and environmental conservation.



Participants visited the Pollinators Paradise

Conclusion

The five-day Economics Training programme successfully enriched the participants' knowledge of economic theories, policy frameworks, and modern teaching methodologies. The sessions provided valuable insights into contemporary economic challenges and equipped educators with tools to integrate innovative approaches into their teaching. Through interactive discussions, case studies, and practical exercises, participants enhanced their analytical and problem-solving skills, fostering a deeper understanding of macroeconomic and microeconomic concepts. The programme created a collaborative environment, encouraging educators to exchange ideas and best practices. The emphasis on NEP 2020 and interdisciplinary learning further strengthened their ability to align economic education with national educational goals.



Overall, the programme was a significant step towards empowering Economics educators with the necessary skills and knowledge to enhance their teaching effectiveness. The feedback received was overwhelmingly positive, indicating the success of the programme in achieving its objectives. Centurion University expresses gratitude to all faculty members, participants, and organisers for their contributions in making this training programme a valuable learning experience.



Participants attending the Valedictory Session

ANNEXURE-I

Attendance Sheet


COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN ECONOMICS
ATTENDANCE SHEET


Date: January 28-24, 2025

Place: Room No. 18, Aryabhata Building, Centurion University of Technology and Management (CUTM), Ramachandrapur, Jatni, Bhubaneswar, Odisha

Sl. No.	Name	Designation	District	Name of Higher Secondary School	Phone No.	Signature of Participants (Name in Block Letter)
1	BINAY KUMAR BEHERA	PGT	Angul	NILAKANTHESWAR H.S. SOUTH BALANDA, TALCHER	9241818097	BINAY KUMAR BEHERA
2	MISS PRATIKSHA MISHRA	PGT	Angul	KOSALA HIGHER SECONDARY SCHOOL, KOSALA	9377107069	PRATIKSHA MISHRA
3	Ashis Kumar Samal	LECTURER	Cuttack	D.G.B.K. Higher Secondary School, Kaniadi, Cuttack	966594344	Ashis Kumar Samal
4	Debadhi das	PGT	Cuttack	Ravenshaw higher secondary school	8322550019	DEBADHI DAS
5	Gulagaha Tabasum	LECTURER	Cuttack	P. P. Dev H.S. School, Tigiria, Cuttack		
6	Gurukul Malik	LECTURER	Cuttack	Brahmanjarilo Higher Secondary School	9668809012	GURUKUL MALIK
7	KHAROD KUMAR MISHRA	LECTURER	Cuttack	SALPUR HIGHER SECONDARY SCHOOL	9346249785	KHAROD KUMAR MISHRA
8	Miss. Anisha Nayak	LECTURER	Cuttack	NOM City Higher Secondary School	9861332566	ANISHA NAYAK
9	SOUMYASIKATA PANDA	LECTURER	Cuttack	SUBHADRA MAHATAB HIGHER SECONDARY SCHOOL, ASURESWAR	8658268233	SOUMYASIKATA PANDA
10	Subrat Kumar Behera	LECTURER	Cuttack	SNK college, French	9770960000	SUBRAT KUMAR BEHERA
11	Suchismita Priyadarshini	LECTURER	Cuttack	Mahapada Achyutananda Higher Secondary School, Lemali	9184195856	SUCHISMITA PRIYADARSHINI

12	SANUKA KUMAR BHOSI	PGT	Debagarh (Droagan)	KANDHAL HIGHER SECONDARY SCHOOL KANDHAL	7325892195	SANUKA KUMAR BHOSI -
13	AMARISH BANDA	LECTURER	Dhenkanal	Kamakhyanagar H. S. School	7008875909	AMARISH BANDA
14	GAIKTRI BALA NAYAK	PGT	Dhenkanal	ANCHALIKA HIGHER SECONDARY SCHOOL, PRADEEN VIHAR, DHENKANAL	6370586242	GAIKTRI BALA NAYAK
15	MANASMITA SAHOO	LECTURER	Dhenkanal	BAPULEE HIGHER SECONDARY SCHOOL, GABHILASUNI	637202094	MANASMITA SAHOO
16	SILU BARIK	LECTURER	Dhenkanal	PARJANG HIGHER SECONDARY SCHOOL, PARJANG	7979492157	SILU BARIK
17	BHAGABATI RAUTA	PGT	Gajapati	WOMEN'S HIGHER SECONDARY SCHOOL, PARALAKHEMUNDI	75969554	BHAGABATI RAUTA.
18	ABHIMANYU NAG	LECTURER	Ganjam	SBP MAHARUDRALAYA, SAMANTAPURU, GANJAM	7735211590	ABHIMANYU NAG
19	Bijayalaxmi Rath	PGT	Ganjam	Science higher secondary school, Akudakhandi	7978358816	BIJAYALAXMI RATH
20	Miss. Manisha Rani Sahu	PGT	Ganjam	Udaya Pratap Science Higher Secondary School		
21	PANCHANAN DAS	PGT	Ganjam	LAXMANARAYAN HIGHER SECONDARY SCHOOL, KODALA	7304141162	PANCHANAN DAS
22	Piyush Swain	LECTURER	Ganjam	Savitri Women's College, Bhanjanagar, Ganjam	9703052996	Piyush Swain
23	SRI CHINMAYA KUMAR SAHU	LECTURER	Ganjam	TENTULIA SASAN DEBATHAN HIGHER SECONDARY SCHOOL, B D PUR	9188500000	CHINMAYA KUMAR SAHU
24	UPENDRA MAJHI	LECTURER	Ganjam	MBC HSS KENDUJARD		
25	AASPRUKHA SUBHALAXMI	PGT	Jagatsinghpur	BARA ABACHUT HIGHER SECONDARY SCHOOL, KANIMEL		
26	Dr. Dilip Kumar Mudali	LECTURER	Jagatsinghpur	SNK Higher Secondary School	7382791500	Dr. Dilip Kumar Mudali
27	MAKUNDA PADHAN	LECTURER	Jagatsinghpur	KIJANG HIGHER SECONDARY SCHOOL		
28	GANAMATHOREN	LECTURER	Kandhamal	ADIVAS HIGHER SECONDARY COLLEGE BAUGUDA		

29	MISS. PADMATSAHU	LECTURER	Kandhamal	N.S.B. HIGHER SECONDARY SCHOOL, TUMAJORBANDHA		
30	Sunil saho	LECTURER	Khordha	Pamananda Higher secondary school, Baligadh	9668855678	SUNIL SAHOO
31	FARHAT KAYENAT	PGT	Khordha	RAMADEBI WOMEN'S HSS BHUBANESWAR	8763596290	FARHAT KAYENAT
32	MISS RUPSA MAITRA	LECTURER	Khordha	D.R. NAKAPALLI COLLEGE, BHUBANESWAR	9051660675	RUPSA MAITRA
33	Sanjay Dusuka	LECTURER	Khordha	Khetrasai D.A.V Higher Secondary School	9085537699	SANJAY DUSUKA
34	Tanmaya Kumar Sahoo	LECTURER	Khordha	Ramamani Higher Secondary School, Kantabad		
35	Tanmaya Kumar Sahoo	LECTURER	Khordha	Nachuni Higher Secondary School	7325949476	TANMAYA KUMAR SAHOO
36	Ranjan Kumar Patra	PGT	Koraput	Govt. Women's Higher Secondary School Koraput		
37	SMT RONALI NAYAK	LECTURER	Koraput	SEMILGUDA HIGHER SECONDARY SCHOOL	6372581999	RONALI NAYAK
38	HARE KRISHNA DUMARI	LECTURER	Mulunghi	DAWIN MEMORIAL HIGHER SECONDARY SCHOOL		
39	BASUDEV HAMMAN	PGT	Nabarangpur	GOVT HSS BHATIGAM		
40	NIRAKARA BISOH	PGT	Nabarangpur	GOVT HIGHER SECONDARY SCHOOL, BORIGAM		
41	EMAJALAMANNHAR BIJAYALAXMI KANHAR	LECTURER	Nayagarh	R.S.HIGHER SECONDARY SCHOOL, ODUGAON	9978805927	BIJAYALAXMI KANHAR
42	DR. BANAMALI DALEI	LECTURER	Nayagarh	NEELAMADHAR HIGHER SECONDARY SCHOOL, KANTLED	777302192	DR. BANAMALI DALEI
43	GITANJALI SAHOO	LECTURER	Nayagarh	GANPUR H.S. SCHOOL, RANPUR	8328667662	GITANJALI SAHOO
44	Arjun Saha	LECTURER	Puri	Mangala Higher Secondary School, Kakatpur	8571942682	ARJUN SAHA
45	JOGESWAR MAUNDA	LECTURER	Puri	NIGAMANANDA MAHILA HIGHER SECONDARY SCHOOL CHARICHAM	8018061501	JOGESWAR MAUNDA

46	Mr. Nareish Kumar Behara	LECTURER	Puri	Sarajmal H.S. School	9420140334	NAREISH KUMAR BEHARA
47	PRAKASH KUMAR SAHOO	LECTURER	Puri	U.G.S HIGHER SECONDARY SCHOOL	9556444795	PRAKASH KUMAR SAHOO
48	Saumita Dalai	LECTURER	Puri	Vinayara HSS		
49	TUJASMISHRA	LECTURER	Puri	GOP HIGHER SECONDARY SCHOOL, GOP	9996766400	TULSI MISHRA
50	MANOJ MENER	PGT	Subarnapur (Sonepur)	SIDDHARTHA HIGHER SECONDARY SCHOOL, BINKA		
51	Ranjan Kumar Muduli	Lecturer	Angul	Utkalmani Gopalbandhu Higher Secondary School, Khamar	955280286	RANJAN KUMAR MUDULI
52	Priyadarini Pradhan	Lecturer	Cuttack	Christ Higher Secondary School		
53	Nayana Baral	Lecturer	Dhenkanal	O.P.S. H.S. School, Hindi Road	90916983	NAYANA BARAL
54	Smt. Samita Sarjanthy	Lecturer	Dhenkanal	Makima Higher Secondary School, Birunda, Dhenkanal	94316111853	SAMITA SATPATRAY
55	Dr. Bandana Mishra	Lecturer	Dhenkanal	Jwal Higher Secondary School	9920387471	BANDANA MISHRA
56	Prabhansu Panda	Lecturer	Ganjam	Khemundi Higher Secondary School		
57	Kshirabdi Tanaya Nayak	Lecturer	Jagatsinghpur	Baikuada Higher Secondary School	7377079146	KSHIRABDI TANAYANAYAK
58	Kahnu Gamango	Lecturer	Kandhamal	Adwasi Higher Secondary School, Baliguda	876394466	KAHNU GAMANGO
59	Sushree Tapaswini Nanda	Lecturer	Khordha	Baligaon Higher Secondary School	7894073753	SUSHREE TAPASWINI NANDA
60	Sabita Behara	Lecturer	Khordha	Shri Jagannath Higher Secondary School		
61	Gadadhari Jena	Lecturer	Khordha	Sarajan Harichandan Higher Secondary School	737701444 9090390577	SABITA BEHARA GADADHAR JENA
62	Laxmipriya Debata	Lecturer	Nayagarh	Rajunakhata Higher Secondary School	95570196	LAXMI PRIYA DEBATA
63	Sibanmangya Mishra	Lecturer	Nayagarh	Pathani Samanta Higher Secondary School, Khandapara		
64	Nandita Surla Lecturer	College	Kishoreganagar college		707997698	NANDITA SURLA

ANNEXURE-II

Feedback Report

NAME: PRATIYKSHA MISHRA

TEACHERS' TRAINING PROGRAMME, CHSE

SUBJECT: ECONOMICS

We had an amazing experience in Centurion University. The teachers' training programme was for 5 days and the lecture sessions we had have been immensely knowledge showing. We were astounded by the magnificent infrastructure the university has. The first feature of this university is promotion of skill diversity which is providing employment to so many people. The promotion of sustainable development is the most striking feature of this university. The flora & fauna of the university is exquisite, Pollinators' Paradise was a treat to the eyes. Even people who don't have an academic background can opt for several courses in their workshops and get employed. The quality of education is phenomenal, and finally the accommodation facilities that university has provided us in these 5 days was great.

We look forward to visiting this campus again in near future. The take-aways from this programme will definitely be implemented by all teachers in their teaching profession.

ANNEXURE-III

SDG Reports

Centurion University emphasizes on skill integrated quality higher education which was quite evident from the campus, as well it aligns with Quality Education, 4th SDGs.

Another astonishing fact was the number of collaborators, & startups that this university has fostered, like centurion transformers, sky rider EV etc. These clearly highlights Partnership for goals, SDG 17 which creates an ecosystem of innovation & entrepreneurship.

Initiatives like sky rider EV, nurtures advancements in sustainable mobility, green infrastructure, creates jobs with global sustainability goals like the 7th 8th & 9th Affordable and Clean energy, Decent work and Economic growth Industry innovation & infrastructure.

DiaFit vice, is a key project committed to advancing societal well being through impactful research, again which keeps up with good SDG, Good Health & well-being.

Boards & tiles being made in the campus are used to build the campus was quite unique way for self sustainance & promoting bee keeping as a skill contributor.

diversity, conservation and sustainable livelihood initiative, again aligns to SDG 11th, 12th & 15th. I hope, more innovations flourish, more enterprises be set up in the near future, with Centurion university as a guide.

-Rupsa Mahtua

Nandita Sunka - Kishoreganagar College

Sustainability, described as center of the 16 goals of SDGs, indicates peace and prosperity of the people and planet, while tackling climate change and environment. The SDGs set by the United Nations leaves the benchmark for policy makers to identify gaps and prioritise action towards achieving the goal of sustainable development by 2030. At the national level SDG India measures national progress on the line of above 16 SDGs by framing 113 indicators, aligned with National Indicator Framework. So

The ^{score of} index which ranges from 0-100, is an indication of progress, with higher score reflecting front-runner and achiever. In the field of inclusive growth and development. In a way it also promotes competitive and cooperative federalism, encouraging states and UTs to learn from each other and close outcome based gaps. As a barometer for measuring progress these indicators has to be also based on local issues, communities and stakeholders to promote institutional ownership, collaborative competition, capacity building and social inclusion approach. Odisha with a score of 58 out of 100 (S.K. Mallick et al 2024) was ranked as a performer state among 16 states. due to its various initiatives done so far in the line of development and inclusive growth.

Assignment-1.

Session Plan


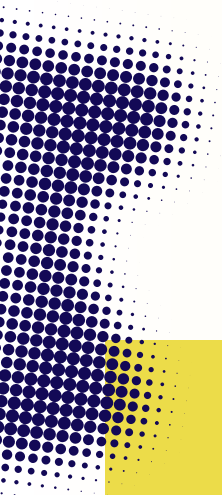
Date	9:30AM-11:00AM	11:00AM - 11:30AM	11:30AM-1:00PM	1:00PM-2:00PM	2:00PM-3:15PM	3:30PM-5:00PM
20/01/2025	Welcome and Introduction	TEA BREAK	Principles of Economics (Dr. Madhusmita Dash)	LUNCH	Challenges faced by Indian Economy (Dr Rabinarayan Patra)	Investment Analysis (Dr. Girija Nandini)
21/01/2025	Challenges faced by Indian Economy (Dr Rabinarayan Patra)		Concept of Economics (Dr Sustanta Kumar Das)		National Income (Dr. Sibaprasad Samal)	Post-COVID Economic Challenges and Developing Action Plan (Dr. Ronismita Mishra)
22/01/2025	Campus Tour (Ronismita/Arpit /Abhinay)		Campus Tour (Ronismita/Arpit /Abhinay)		Introductory Micro Economics (Prof.Satyakan Mishra)	Session on Ethics by Prof. KVD Prakash, Dean HRD
23/01/2025	Indian Financial System (Prof. Pramod Patjoshi)		Sectoral Development - Focusing on Agriculture (Dr. Pradip Kumar Sahu)		Use of ICT and AI in Teaching Learning (Dr. Ansuman Jena)	NEP 2020 (Dr. Ajaya Kumar Nayak)
24/01/2025	Money Banking and Public Finance (Dr. Dukhabandhu Sir)		Overview of Indian Indian Economy (Dr Sanjeet Ku. Mohapatra)		Entrepreneurship and Economic Development (Prof. Ronismita Mishra)	Valedictory Ceremony

Glimpses



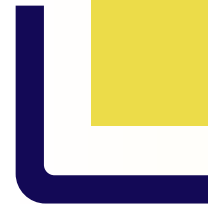
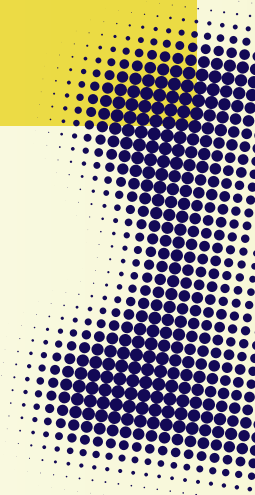
Participants during the Campus Tour





SNIPPET ON

**TEACHERS TRAINING PROGRAMME
FOR PHYSICS TEACHERS
SPONSORED BY COUNCIL OF HIGHER
SECONDARY EDUCATION (CHSE)
GOVT. OF ODISHA, INDIA**



Facilitators and Presenters

SL. NO.	NAME	POSITION	SUBJECT
1.	PROF. (DR.) MUKTI KANTA MISHRA	(PRESIDENT, CUTM)	THE JOURNEY OF CENTURION UNIVERSITY AND THE FUTURE OF AR AND VR
2.	DR. SAUBHAGYALAXMI BEHERA	PROFESSOR	EMERGING FIELD OF RESEARCH
3.	DR. SANJAYA SUAR	PROFESSOR	WAVES AND OSCILLATIONS IN MODERN APPROACHES
4.	BIKASH JENA	PROFESSOR	NANO MATERIALS FOR INDUSTRIAL APPLICATIONS
5.	SUBHRARAJ PANDA	PROFESSOR	NANO MATERIALS FOR INDUSTRIAL APPLICATIONS
6.	PROF. KVD PRAKASH	PROFESSOR	ETHICS
7.	DR. KAMALAKANTA JENA	PROFESSOR	SEMICONDUCTOR
8.	DR. NILAKANTA PANIGRAHI	PROFESSOR	NA
9.	DR. AJAY NAYAK	PROFESSOR	NEP 2020
10.	PROF. L.P SINGH	PROFESSOR	ELEMENT OF MATERIAL STRUCTURE
11.	DR. SURYANARAYANA NAYAK	PROFESSOR	NEUTRINO PHYSICS
12.	DR. SUBRAT SARANGI	PROFESSOR	UNIVERSALITY LAWS OF PHYSICS AND METHODOLOGY OF SCIENCE
13.	DR. PADMAJA PATNAIK	PROFESSOR	SKILL
14.	DR. PRASANTA KUMAR PARIDA	PROFESSOR	PHYSICS AND NATURE
15.	DR. SUBHRAJ PANDA	PROFESSOR	RADIO-ISOTOPE AND ITS APPLICATIONS

Name of Attendees

SL. NO.	NAME	POSITION	SCHOOL
1	BIJAYA KUMAR PARIDA	LECTURER	SUBHADRA MAHATAB H. S. SCHOOL, ASURESWAR
2	JAYASHREE PATTANAYAK	LECTURER	SALIPUR HSS
3	PRATIKHYA SAHOO	LECTURER	BRAHMANJHARILO MAHAVIDHYALAYA
4	MAMALI PRIYADARSHINI	LECTURER	PANCHAYAT PRAHALAD HIGHER SECONDARY SCHOOL. NISCHINTAKOILI
5	ABHAYA KANTA PANIGRAHY	LECTURER	HILL TOP H.S SCHOOL MOHANA
6	JAYDEV DAS	LECTURER	GOVT SSD HSS MOHANA GAJAPATI
7	LAXMAN KAND	LECTURER	SCIENCE HIGHER SECONDARY SCHOOL, KONKORADA
8	MONALISA SAHOO	LECTURER	SAVITRI WOMEN'S HIGHER SECONDARY SCHOOL BHANJANAGAR
9	GUPTESWAR SABAT	LECTURER	SRI BHARATA PATI HIGHER SECONDARY SCHOOL, SAMANTIAPALLI, GANJAM
10	JITU MUTHAMAJHI	LECTURER	SCIENCE HIGHER SECONDARY SCHOOL, HINJILICUT, GANJAM
11	JITENDRA KUMAR SWAIN	LECTURER	BALIKUDA WOMEN'S HIGHER SECONDARY SCHOOL, BALIKUDA
12	LOPAMUDRA JENA	LECTURER	SAHASPUR HIGHER SECONDARY SCHOOL, BALICHANDRAPUR, JAIPUR
13	DR. AMBIKA PRASAD JENA	LECTURER	KHARASROTA HIGHER SECONDARY SCHOOL
14	MONALISHA SAHOO	LECTURER	BABA BHAIKABANANDA HIGHER SECONDARY SCHOOL, CHANDIKHOLE
15	BISWAJIT PRADHAN	LECTURER	GOVT.(SSD) HIGHER SECONDARY SCHOOL, BADAGAM
16	PRADEEPTA NAIK	LECTURER	ADIVASI HIGHER SECONDARY SCHOOL, BALLIGUDA
17	SATYANARAYAN PRADHAN	LECTURER	GOVERNMENT (SSD) HIGHER SECONDARY SCHOOL, KOTAGARH
18	SUJATA PARIDA	LECTURER	GOVT. SCIENCE HSS, AYEBA
19	SANJULATA MAJHI	LECTURER	RAMA DEVI HIGHER SECONDARY SCHOOL, BHUBANESWAR
20	SMT. SRADHANJALI SAHOO	LECTURER	D.R. NAYAPALLI COLLEGE, BHUBANESWAR
21	ASCHARYA KUMAR KAR	LECTURER	JATNI H. S. SCHOOL
22	JYOTIRMAYEE SAHOO	LECTURER	BANESWAR HIGHER SECONDARY SCHOOL, BENTAPUR

23	MAMATA SWAIN	LECTURER	GOVT. (SSD) HSS, BURJA, KORAPUT
24	DIPAK KUMAR SAHOO	LECTURER	GOVT. SSD HIGHER SECONDARY SCHOOL, BADABHARANDI
25	SWAPNAMAYEE SAHOO	LECTURER	HIGHER SECONDARY SCHOOL BAULASAHI NAYAGAH
26	DR SORNA PRAVA BARIK	LECTURER	NIMAPARA HIGHER SECONDARY SCHOOL
27	ABINASHA MOHANTY	LECTURER	BANISHREE HIGHER SECONDARY SCHOOL, KUANARPUR
28	RAM SIDDHARTH GIRI	LECTURER	RAVENSHAW HIGHER SECONDARY SCHOOL
29	BIBHU PRASAD PATRO	LECTURER	SCIENCE HIGHER SECONDARY SCHOOL KUKUDAKHANDI GANJAM
30	SMT. MANASWINI RANA	LECTURER	BASUDEBA SETHY SCIENCE HS SCHOOL, BHATAKUMARADA
31	AJAY KUMAR SAHOO	LECTURER	BIJUPATTANAIAK H S SCHOOL ASHRAMPATANA
32	SRI BANOJ MOHANTY	LECTURER	BAISI MOUZA HIGHER SECONDARY SCHOOL
33	SRI ASHOK KUMAR SAHOO	LECTURER	BISHNUSAMANTARAY HIGHERSECONDARY SCHOOL
34	BRAHMANANDA SETHI	LECTURER	TULASI WOMEN'S COLLEGE, KENDRAPARA
35	PRATAP KUMAR JENA	LECTURER	H.N.S HIGHER SECONDARY SCHOOL.
36	ABHIJIT SAHOO	LECTURER	GODAVARIS HIGHER SECONDARY SCHOOL
37	SANDEEP KUMAR PALATASINGH	LECTURER	SHRI JAGANNATH HIGHER SECONDARY SCHOOL
38	PRASHANTA KUMAR SUBUDHI	LECTURER	KAMALA NEHRU H.S.S, BBSR
39	ABHISIKTA MISHRA	LECTURER	KSHETRABASI D.A.V. HIGHER SECONDARY SCHOOL
40	DIPTI MAYEE DAS	LECTURER	AMBEDKAR CENTENARY HSS OF EDUCATION & TECHNOLOGY DUMUDUMA, BHUBANESWAR.751019
41	SHAILENDRA KUMAR PARIDA	LECTURER	SANATAN HARICHANDAN HIGHER SECONDARY SCHOOL
42	DR. SUDHANSHU SEKHAR PATTNAIK	LECTURER	BHAIRAB H.S.S. BORIGUMMA, KORAPUT
43	GANGADHAR MAHAPATRA	LECTURER	S.L.A.H.S. SCHOOL, GODIPADA
44	PRADEEP KUMAR NAYAK	LECTURER	PURI WOMENS H S SCHOOL PURI
45	SANJAYA KUMAR DALAI	LECTURER	KALYANPUR SCIENCE HIGHER SECONDARY SCHOOL
46	DURGA PRASAD TRIPATHY	LECTURER	SSBG HIGHER SECONDARY SCHOOL, BALIGHAI

Introduction

The Physics Training programme, held from 4th to 8th February 2025 at Centurion University of Technology and Management, was a collaborative and intensive initiative aimed at enhancing the teaching methodologies and technical expertise of Physics educators under the Council of Higher Secondary Education (CHSE). This five-day programme was meticulously designed to provide participants with a blend of theoretical knowledge and practical exposure to modern physics. By incorporating a variety of interactive sessions, hands-on training, and expert-led discussions, the programme sought to: Empower educators with advanced teaching techniques tailored to contemporary physics. Introduce participants to cutting-edge research and methodologies in the field of physics. Foster a collaborative environment for exchanging ideas and best practices among educators. Strengthen participants' capacity to inspire and engage students with innovative approaches.

The programme highlighted the importance of staying updated with scientific advancements in physics while emphasising practical applications that resonate with real-world scenarios. It also provided a platform for educators to bridge gaps in traditional teaching methods by integrating modern technologies and methodologies into the CHSE curriculum. This comprehensive training not only aimed to elevate the participants' knowledge but also equipped them with tools to make physics a more interactive and engaging subject for their students.

Broad Objectives

The Physics Training programme was designed with the following primary objectives:

- To empower educators with contemporary knowledge and skills in the field of physics.
- To align teaching practices with the principles and vision of the National Education Policy (NEP) 2020, emphasising holistic and interdisciplinary learning.
- To enable effective teaching and inspire students in the subject of physics.
- To provide a collaborative platform for the exchange of ideas and best practices.
- To foster innovative teaching approaches and bridge gaps between traditional and modern educational methods.

SPECIFIC OBJECTIVES AND LEARNING OUTCOMES SESSION-WISE

Day 1 (4th February 2025)

Session 1: Introduction and Interaction with Participants

This opening session aimed to create a welcoming atmosphere and build a positive rapport between participants and facilitators. Activities included introductions and a brief outline of the programme's structure. The facilitators encouraged participants to express their expectations and goals for the programme, fostering a sense of inclusivity. By the end of this session, participants felt comfortable and ready to engage, understanding the collaborative and interactive nature of the training.

Session 2: Training programme Details

In this session, facilitators provided an in-depth overview of the programme's framework, breaking down the objectives and content of each session. They highlighted the expected outcomes, how each session would build on the previous one, and the approach to active learning, including group discussions and hands-on activities. Participants gained a clear understanding of the programme's goals, the structure, and what was expected of them, which motivated them to participate actively.

Session 3: Department Overview and Vedic Charcha

This session focused on an introduction to the Department of Physics and its faculty members. The facilitators presented an overview of the department's vision, ongoing research, and the role of educators in shaping future physicists. Additionally, a segment on Vedic Charcha (discussion of ancient Indian sciences) was incorporated to explore the intersection between modern physics and ancient scientific knowledge. Participants gained a deeper understanding of the department's focus and the importance of integrating traditional knowledge with contemporary education.

Session 4: Campus Visit

A guided tour of the university's facilities focused on the cutting-edge innovations and learning opportunities provided to students. The visit included the following key units:

- **Transformer Unit:** Demonstration of transformer technology and its applications.
- **EV Vehicle Unit:** Exploration of electric vehicle technologies being developed and tested.
- **3D Printing Machine Unit:** Introduction to the use of 3D printing in physics and its potential in scientific research and experimentation.
- **Waste to Wealth Unit:** A look at how physics principles are applied in sustainable solutions for waste management and energy recovery.
- **Experiential Learning Centre:** A hands-on learning centre where participants could engage in practical applications of physics concepts.
- Participants gained firsthand knowledge of how theoretical physics is applied in various innovative technologies, enriching their understanding and teaching methodologies.



Participants during Campus Tour at CUTM

Day 2 - 5th February 2025

Session 1: Emerging Field of Research

This session covered new, cutting-edge research topics, highlighting the latest trends and advancements in various scientific fields. Emerging areas included artificial intelligence, sustainable technologies, and advanced materials. The focus was on the evolving nature of research and how it addresses current challenges. Participants gained insight into the latest trends in research and understood the impact of new technologies and methodologies on scientific progress.

Session 2: Excellent Way of Teaching and Solving All Kinds of Problems

This session explored effective teaching methodologies and strategies for problem-solving, emphasising how educators can approach difficult topics and guide students to solutions. It concentrated on creating an engaging learning environment, addressing challenges students face, and encouraging critical thinking. Participants learnt approaches for improving teaching skills and engagement, focusing on problem-solving frameworks to help students tackle complex concepts and methods for adapting teaching techniques to different learning styles.

Session 3: Nanomaterials for Industrial Applications

This session focused on the role of nanomaterials in industries such as medicine, electronics, energy, and manufacturing. The unique properties of nanomaterials, such as increased strength and improved conductivity, were highlighted for their potential in driving industrial innovation. Participants understood the properties and applications of nanomaterials, explored the potential of nanotechnology in solving real-world industrial problems, and examined the benefits and challenges of implementing nanomaterials in industry.

Session 4: About Different Skills Provided by National Education Policy (NEP)

This session explained the various skills outlined in India's National Education Policy (NEP), which emphasises the holistic development of students through skills like critical thinking, creativity, and practical knowledge. It discussed how these skills can be integrated into the curriculum and their impact on student development. Participants received an overview of the key skills emphasised by the NEP, such as critical thinking, adaptability, and digital literacy, and understood how to incorporate NEP's framework into teaching practices.

Day 3 - 6th February 2025

Session 1 & 2: Philosophical as Well as Scientific Aspects of Physics in Everyday Life

This session explored both the philosophical and scientific dimensions of physics in the context of daily life. Philosophically, it discussed the nature of reality, the fundamental principles governing the universe, and how our understanding of physics shapes our worldview. Scientifically, it focused on how physics principles apply to common phenomena encountered daily, such as motion, energy, and forces.

- **Philosophical Aspects:** Examined how physics has influenced human thought, from early philosophical questions about the nature of the universe to the development of modern scientific theories.
- **Scientific Aspects:** Highlighted real-world applications of physics in everyday life—understanding concepts like gravity, energy conservation, and thermodynamics by observing their effects on daily activities (e.g., how cars move, how refrigerators work).
- **Linking Philosophy and Science:** Explored the deep connection between abstract principles and practical, observable phenomena.

Session 3: Role of Teachers in Teaching and Different Techniques to Bring Interest in Students in Studying Physics

This session focused on the importance of teachers in inspiring and educating students in the subject of physics. It delved into various teaching techniques that can make physics more engaging, accessible, and enjoyable for students. The session covered innovative methods such as inquiry-based learning, the use of experiments, visual aids, and real-world connections to capture students' curiosity and foster a deeper understanding of the subject. The role of teachers focuses on how teachers can shape students' perceptions of physics and inspire a lifelong interest in science. Engagement techniques focused on the practical strategies for making physics more relatable and interesting, such as using interactive demonstrations, hands-on experiments, and connecting physics principles to everyday life. Fostering curiosity emphasized approaches to encourage students to ask questions, explore concepts deeply, and think critically about the physical world around them.

Session 4: About National Education Policy (NEP)

This session provided an overview of the National Education Policy (NEP) and its implications for education in India. It covered the key features of the NEP, such as a shift towards competency-based education, an emphasis on skill development, and the integration of technology in teaching. The session discussed how the NEP aims to revolutionize the Indian education system and improve student learning outcomes, particularly in the sciences. Insights into the NEP's focus on holistic education, flexible learning paths, and promoting creativity and critical thinking. Impact on Physics Education focused on how the NEP can influence the teaching of subjects like physics, including promoting a more interdisciplinary approach and enhancing student-centered learning. Opportunities for Educators focused on understanding how teachers can adapt to the changes in the NEP and leverage new tools and methods to improve the quality of physics education.

Day 4 - 7th February 2025

Session 1: Elements of Materials Structure

This session explored the fundamental components that make up materials at the atomic and molecular level. Topics included the structure of solids, the role of atoms, ions, and molecules in determining material properties, as well as how different bonding types (covalent, ionic, metallic) affect the structure and behavior of materials. Here in this session Atomic and Molecular Structure was focused. How atoms and molecules combine to form materials with unique properties. The arrangement of atoms in crystalline solids and how this arrangement impacts material properties such as strength, conductivity, and flexibility. Understanding how different bonding types (covalent, ionic, metallic) influence the physical and chemical properties of materials. Real-world applications of materials science, such as in electronics, construction, and manufacturing.

Session 2: Neutrino Physics

This session focused on the properties, behavior, and importance of neutrinos in physics. Neutrinos are elementary particles that are incredibly difficult to detect due to their lack of electric charge and minimal interaction with matter. The session covered their role in particle physics, their discovery, and how they are used to explore fundamental questions about the universe. This session focused on the introduction to Neutrinos, what neutrinos are, their characteristics (e.g., massless or extremely low mass, no charge), and their role in the Standard Model of particle physics.

The challenges and methods involved in detecting neutrinos, including neutrino observatories and experiments like those in deep mines or underwater. How neutrinos help us understand cosmic phenomena such as supernovae and the inner workings of stars. The phenomenon where neutrinos can change from one type to another, offering insights into physics beyond the Standard Model.

Session 3: Universality of Laws of Physics and Methodology of Science

This session discussed the universality of physical laws, meaning that the laws of physics are the same throughout the universe, regardless of location or time. It also covered the scientific method—how scientists approach problems, test hypotheses, and develop theories based on evidence. The concept that fundamental laws of physics, such as gravity, thermodynamics, and electromagnetism, apply universally across space and time. How science progresses through observation, experimentation, and the formulation of theories, followed by testing and refinement. How different scientific fields (physics, chemistry, biology) work together to uncover the nature of the universe, and how methodologies like experimentation, modeling, and simulation drive discoveries. Understanding how the universality of physical laws allows scientists to make predictions about distant galaxies, particle collisions, or even everyday phenomena like weather patterns.

Session 4: Ethics

This session addressed the ethical considerations and responsibilities that scientists, particularly in physics, must take into account in their research and applications. It explored how the progress of science intersects with societal values, and the importance of conducting research responsibly, with respect for the environment and human welfare. The need for integrity, transparency, and accountability in scientific research and experimentation. How advances in physics and technology (e.g., nuclear energy, AI, genetic engineering) present ethical dilemmas and affect society. The importance of ensuring that scientific advancements are used for the common good, while considering the impact on the environment, public health, and human rights. Discussing ethical frameworks and guidelines that help guide scientists in making decisions that balance innovation with moral responsibility.

Day 5 - 8th February 2025

Session 1: Excellent Session Regarding Physics and Nature

This session explored the relationship between the physical laws of nature and the natural world. Topics included the role of physics in understanding natural phenomena like weather patterns, the motion of celestial bodies, and the forces that shape our planet. How physical principles govern natural processes, such as the laws of motion in plants and animals, the flow of energy in ecosystems, and the mechanics of Earth's climate. Understanding how physics connects with other natural sciences like biology, chemistry, and ecology to give a holistic view of the natural world. The fundamental laws of physics—gravity, electromagnetism, thermodynamics, and quantum mechanics—that are present throughout the natural environment and the universe.

Session 2: Radioisotopes and Their Application, Especially in Cancer Treatment

This session discussed the use of radioisotopes in medicine, particularly their applications in cancer treatment (radiotherapy). Radioisotopes are unstable isotopes that emit radiation, which can be used in diagnostic imaging and therapy. Understanding the properties of radioisotopes and how they are produced. Common examples include iodine-131, cobalt-60, and technetium-99m. How radioisotopes are used in cancer treatments like brachytherapy, targeted radiation therapy, and diagnostics. This includes their ability to target and destroy cancer cells while minimizing damage to healthy tissue. The broader applications of radioisotopes in medical imaging, diagnosis (e.g., PET scans), and sterilization of medical equipment. The safety measures required when using radioactive materials in medicine to protect both patients and healthcare providers.

Session 3: Presentation and Feedback of the Participants

This session provided an opportunity for participants to reflect on and present the knowledge they gained throughout the programme. It also included a feedback session where participants could share their experiences, thoughts, and suggestions for improving future sessions. An open discussion was held where participants provided constructive feedback on the programme, including what they learnt, what could be improved, and how the content can be applied in their teaching or research.

Session 4: Valedictory Session with Photo Session

The programme concluded with a formal valedictory session, where participants celebrated their accomplishments and reflected on their experiences. A photo session captured these moments of achievement, and the session included emotional moments as participants shared their growth and future aspirations. Participants received certificates of completion, acknowledging their hard work and dedication throughout the programme. A formal speech by the organizers highlighted key moments from the course, expressed gratitude for participation, and encouraged the continued application of what was learnt. Participants shared their personal reflections on how the programme impacted them, both professionally and personally, and how they planned to implement what they had learnt in their future endeavours.

Special Session

The Journey of Centurion University and the Future of AR and VR

Speaker: Prof. (Dr.) Mukti Kanta Mishra (President, CUTM)

Centurion University of Technology and Management (CUTM) has established itself as a pioneer in skill-integrated education by bridging the gap between theory and practice. The institution has made notable progress in innovation, entrepreneurship, and sustainability with an emphasis on industry partnerships, experiential learning, and vocational training. Similarly, Augmented Reality (AR) and Virtual Reality (VR) are revolutionizing a variety of industries, including education, healthcare, retail, real estate, and training. These technologies simplify labour and real estate training, enhance learning, improve medical processes, and provide immersive shopping experiences.

The innovative methodology of CUTM aligns seamlessly with advancements in AR and VR. By integrating these technologies into its curriculum, the institution can enhance its skill-based education paradigm and prepare students for the evolving digital world.

Campus Tour

A campus tour of various production units at Centurion University was conducted. This tour was designed to provide participants with insights into the university's diverse and innovative units focused on technology, sustainability, and vocational education. The session spanned from 2:30 pm to 5:00 pm and covered a range of topics such as renewable energy, sustainable practices, paramedic education, and cutting-edge technologies.

The following report outlines the key highlights and learning outcomes from each session.
Tour Schedule and Learning Outcomes

2:30 pm – 2:45 pm: CDC, Transformer, Waste to Wealth

The first stop of the tour included the CDC (Career Development Centre), Transformer unit, Waste to Wealth initiative, and WELL (Water, Energy, and Livelihood).

2:45 pm – 3:15 pm: School of Paramedics/Law

A visit to the School of Paramedics and School of Law provided insights into the educational approaches and technologies used in these disciplines.

3:15 pm – 3:30 pm: Renewable Energy

This session focused on renewable energy solutions implemented at Centurion University, highlighting the role of solar, wind, and other renewable sources in the university's sustainability efforts.

3:30 pm – 3:45 pm: Apparel COE

The Apparel Centre of Excellence (COE) presented innovations in the textile and apparel industry. Participants were shown the latest advancements in fabric production, garment design, and manufacturing techniques. They also explored how the COE fosters skill development in textile production and fashion design, preparing students for the competitive apparel industry.

3:45 pm – 4:00 pm: Experience Center

The Experience Centre showcased various products being manufactured at the university.

4:00 pm – 4:15 pm: ASDC ITI/ITOT/Ashok Leyland/Hyundai, Yamaha

This session highlighted the collaboration between the Automotive Skills Development Council (ASDC) and industry leaders such as Ashok Leyland, Hyundai, and Yamaha. Participants observed the advanced training programmes offered through these collaborations, covering everything from automotive mechanics to customer service. The session emphasised the importance of industry-academia partnerships in developing skilled professionals for the automotive sector.

4:15 pm – 4:30 pm: Future Nexus, AR/VR

Future Nexus, an advanced research unit, introduced participants to the future of AR/VR applications. Participants learnt about the latest trends in AR/VR technologies, including their use in virtual simulations, remote collaboration, and immersive learning. They were shown how these technologies are shaping the future of education and industry applications.

4:30 pm – 4:45 pm: EV, CNC, 3D Printing

This session introduced participants to innovations in electric vehicles (EVs), computer numerical control (CNC) machining, and 3D printing technologies.

4:45 pm – 5:00 pm: School of Maritime

The final stop was the School of Maritime, where participants learnt about the programmes and facilities related to maritime studies and shipbuilding. Participants were introduced to cutting-edge technology used in the maritime industry, including ship design, navigation, and sustainable practices for marine resource management. The session emphasised the growing importance of maritime education in global trade and environmental conservation.



Prof. (Dr.) Mukti Kanta Mishra (President, CUTM) Interacting with the Participants

Conclusion

The training programme at Centurion University has successfully provided participants with an in-depth and practical understanding of the diverse fields within Physics, Material Science, and various interdisciplinary technologies. Over the course of several days, participants were exposed to cutting-edge research, innovative practices, and hands-on applications that bridge the gap between theoretical knowledge and real-world implementation. From learning about the National Education Policy 2020 and its alignment with modern educational strategies, to exploring advanced plant sciences, genetics, biotechnology, and sustainable practices, participants have gained invaluable insights into both the scientific and practical aspects of their disciplines.

Additionally, the exposure to various production units, including those focused on renewable energy, paramedics, apparel design, and AR/VR technologies, has demonstrated the breadth of knowledge and innovative spirit fostered at Centurion University. The campus tour, particularly to production units such as the EV, CNC, 3D printing, and School of Maritime, further broadened participants' perspectives by highlighting the importance of industry-academia collaborations and the future of emerging technologies. This training programme not only enhanced the participants' knowledge but also fostered a deeper appreciation for integrating sustainability, innovation, and hands-on learning into their respective fields. It has prepared them to apply these learnings in their own academic or professional settings and make meaningful contributions to their industries. The programme has been an enriching experience that equipped participants with both theoretical foundations and practical skills.



Participants Attending Valedictory Ceremony

ANNEXURE-I

Attendance Sheet

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA

TRAINING PROGRAMME IN PHYSICS
ATTENDANCE SHEET

Date: February 04-08 February,
Place: Room No. 18, Aryahatta Building, Centurion University of Technology and Management (CUTM), Ramachandrapur, Jatni, Bhubaneswar, Odisha

Sl. No.	Name	Designation	District	Name of Higher Secondary School	Phone No	Signature of Participants (Name in Block Letter)
1	ARCHANA MISHRA	LECTURER	Bouda	PANCHAYAT HIGHER SECONDARY SCHOOL KANTAMAL	7205469223	
2	DEEPAK SAHU	LECTURER	Cuttack	D.G.B.K HIGHER SECONDARY SCHOOL	8658593064	
3	BIJAYA KUMAR PARIDA	LECTURER	Cuttack	SUBHADRA MAHATAB H.S. SCHOOL, ASURESWAR	8984746235	Bijaya Kumar Parida
4	JAYASHREE PATTANAYAK	LECTURER	Cuttack	SALIPUR HSS	8895048512	Jayashree Pattanayak
5	ABHIJIT SARANGI	LECTURER	Cuttack	CHRIST HIGHER SECONDARY SCHOOL	9437408006	
6	Pratikhya saho	LECTURER	Cuttack	Brahmanjarlo mahavidyalaya	9778328993	PRATIKHYA SAHO
7	Mamali Priyadarshini	LECTURER	Cuttack	Panchayat Prahalad Higher Secondary School, Nischintakoli	8093588587	Mamali Priyadarshini
8	ABHAYA KANTA PANIGRAHY	LECTURER	Gajapati	HILL TOP H.S SCHOOL MOHANA	8895769090	ABHAYA KANTA PANIGRAHY
9	JAYDEV Das	PGT	Gajapati	Govt SSD has mohana Gajapati	7008484543	JAYDEV DAS
10	LAXMAN KAND	LECTURER	Ganjam	Science Higher Secondary School, Konkorada	9318432718	LAXMAN KAND
11	Monalisa Sahoo	LECTURER	Ganjam	Savitri women's higher secondary school bhanjanagar	9348402760	Monalisa Sahoo
12	MANAS KUMAR BEHERA	LECTURER	Ganjam	K.P.S.C.H.S.SCHOOL, LANGALESWAR KHALIKOTE GANJAM	8342982491	
13	GUPTESWAR SABAT	LECTURER	Ganjam	SRI BHARATA PATI HIGHER SECONDARY SCHOOL, SAMANTIAPALLI, GANJAM	7008971930	GUPTESWAR SABAT
14	Dr. AJAYA KUMAR PENTHOI	LECTURER	Ganjam	CITY HIGHER SECONDARY SCHOOL, BERHAMPUR	9437778169	
15	JITU MUTHAMAJHI	LECTURER	Ganjam	SCIENCE HIGHER SECONDARY SCHOOL, HINJILICUT, GANJAM	8763785047	Jitu Muthamajhi
16	Abhishek Behera	LECTURER	Ganjam	N.B.C HSS, Kendupadar	9348888656	
17	DR PURNA CHANDRA PANDA	LECTURER	Ganjam	TENTULIA SASAN DEBASTHAN HIGHER SECONDARY SCHOOL, B D PUR	7847882877	


18	SWARUPA SAHU	PGT	Ganjam	Khetra Mohan Science Higher Secondary School, Navindrapur	9337199280	
19	JITENDRA KUMAR SWAIN	LECTURER	Jagatsinghpur	BALIKUDA WOMEN'S HIGHER SECONDARY SCHOOL, BALIKUDA	8908493700	Jitendra Kumar Swain
20	Hrutesh Tripathy	LECTURER	Jaipur	Indira Gandhi Mahila Higher Secondary School, Jaipur Road	8093747796	
21	Bijayini Biswal	LECTURER	Jaipur	Openderanath Sarada Higher secondary school, Murgol, Jaipur	7873413610	
22	Lopamudra jena	LECTURER	Jaipur	Sahaspur Higher secondary school, Balchandrapur, Jaipur	8917475085	Lopamudra Jena
23	DR. AMBIKA PRASAD JENA	LECTURER	Jaipur	KHARASROTA HIGHER SECONDARY SCHOOL	9746532085	Ambika Prasad Jena
24	BHOLANATH NAYAK	LECTURER	Jaipur	M.J.D. Mahavidyalaya, Chhatra, Jaipur	7978956283	
25	MONALISMA SAHOO	LECTURER	Jaipur	BABA BHABANANDA HIGHER SECONDARY SCHOOL, CHANDIKHOLE	8598874822	MONALISMA SAHOO
26	Bipin Kumar sethy	PGT	Kandhamal	GOVT (SSD) HSS Kudatoli kandhamal odisha	8895619064	
27	BISWAJIT PRADHAN	PGT	Kandhamal	GOVT(SSD) HIGHER SECONDARY SCHOOL, BAGAM	9437517259	BISWAJIT PRADHAN
28	PRADEEPTA NAIK	LECTURER	Kandhamal	ADIVASI HIGHER SECONDARY SCHOOL, BALLIGUDA	7978799932	PRADEEPTA NAIK
29	SATYANARAYAN PRADHAN	PGT	Kandhamal	GOVERNMENT (SSD) HIGHER SECONDARY SCHOOL, KOTAGARI	9337596930	SATYANARAYAN PRADHAN
30	Sujata Parida	PGT	Kendrapara	GOVT. SCIENCE HSS, AYERBA	9937935968	SUJATA PARIDA
31	Jyoti puspa Behera	LECTURER	Kendrapara	Sailendra Narayan H.S School, Rajkanika	8984580226	
32	Ms. Archana Behera	PGT	Kendrapara	VIR HANUMAN JEW HIGHER SECONDARY SCHOOL, NIKIRAI	8260625249	
33	Abhijit Pradhan	LECTURER	Kendrapara	Derabis Higher secondary school	9348017793	
34	SANJULATA MAJHI	PGT	Khordha	RAMA DEVI HIGHER SECONDARY SCHOOL, BHUBANESWAR	7978973245	Sanjulata Majhi
35	SMT. SRADHANJALI SAHOO	LECTURER	Khordha	D.R. NAYAPALLI COLLEGE, BHUBANESWAR	9090764686	Sradhanjali Sahoo
36	SUNEHA RANA	LECTURER	Khordha	MAHARISHI HIGHER SECONDARY SCHOOL OF NATURAL LAW, BHUBANESWAR	9437413728	
37	Mr. Aswini Kumar Mishra	LECTURER	Khordha	Nachani Higher Secondary School	9040404460	

38	Ashcharya Kumar Kar	LECTURER	Khordha	Jetai H. S. SCHOOL	9778708684	Ashcharya Kumar Kar
39	LILI BEHERA	LECTURER	Khordha	HALADIA HIGHER SECONDARY SCHOOL	9078983638	
40	JYOTIRMAYEE SAHOO	LECTURER	Khordha	Baneswar Higher Secondary School, Bantapur	8144479288	Jyotirmayee Sahoo
41	MAMATA SWAIN	PGT	Koraput	GOVT. (SSD) HSS, BURJA, KORAPUT	9337506184	MAMATA SWAIN
42	SUJIT KUMAR PATTJOSHI	PGT	Malikangiri	GOVT (SSD) H.S.S. GOVINDAPALLY, MALIKANGIRI	8984272683	
43	DIPAK KUMAR SAHOO	PGT	Nabarangpur	GOVT. SSD HIGHER SECONDARY SCHOOL, BADABHARANDI	8658493647	Dipak Kumar Sahoo
44	MONALISA SAMAL	LECTURER	Nayagarh	SARANKUL HIGHER SECONDARY SCHOOL, SARANKUL	7978343912	
45	PADMA CHARAN SAHOO	LECTURER	Nayagarh	RAJSUNAKHALA HIGHER SECONDARY SCHOOL	7978640734	
46	SWAPNAMAYEE SAHOO	LECTURER	Nayagarh	HIGHER SECONDARY SCHOOL BAULASAHU NAYAGAH	9178970074	Swapnamayee Sahoo
47	Dr Sorna Prava Barik	LECTURER	Puri	Nimapara Higher Secondary School	9749743148	Dr Sorna Prava Barik
48	ABINASHA MOHANTY	LECTURER	Puri	BANISHREE HIGHER SECONDARY SCHOOL, KUANARPUR	7077537911	Abinasha Mohanty
49	JYOTSHNARANI SAHOO	LECTURER	Puri	GOP HIGHER SECONDARY SCHOOL GOP	9776143237	
50	snehasis nayak	LECTURER	Puri	prachi higher secondary school	7751890883	
51	RAM SIDDHARTH GIRI	PGT	Cuttack	RAVENSHAW HIGHER SECONDARY SCHOOL	9776246164	RAM SIDDHARTH GIRI
52	Captain Akshaya Kumar Dash	LECTURER	Cuttack	Stewart science college	7008241588	
53	Bibhu Prasad Patro	LECTURER	Ganjam	Science higher secondary school Kukulakhandi Ganjam	9937186001	Bibhu Prasad Patro
54	SMT. MANASWINI RANA	LECTURER	Ganjam	BASUDEBA SETHY SCIENCE HS SCHOOL BHATAKUMARADA	9348086923	Manaswini Rana
55	AJAY KUMAR SAHOO	LECTURER	Bilaspur	BIJUPATTANA H S SCHOOL ASHRAMPATANA	9937765119	Ajay Kumar Sahoo
56	Sri Banaj Mohanty	LECTURER	Bilaspur	Baisi Mouza Higher Secondary School	9438244606	Banaj Mohanty
57	SRI ASHOK KUMAR SAHOO	LECTURER	Jaipur	BISHNUSAMANTARAY HIGHER SECONDARY SCHOOL	7978983001	ASHOK KUMAR SAHOO

58	SIPUN BEHERA	PGT	Kandhamal	GOVT. (SSD) HIGHER SECONDARY SCHOOL, RANAPATULI	9853217584	
59	BRAHMANANDA SETHI	LECTURER	Kendrapara	Tulasi Women's College, Kendrapara	8658373096	BRAHMANANDA SETHI Brahmananda Sethi 04.02.2025
60	Pratap kumar jena	LECTURER	Kendrapara	IENS Higher secondary school	9938249032	PRATAP KUMAR JENA
61	Abhijit Sahoo	LECTURER	Khordha	Godavari higher secondary school	9853447845	ABHIJIT SAHOO 04.02.25
62	Sandeep Kumar Palatasingh	LECTURER	Khordha	Shri Jagannath Higher Secondary School	8847859388	SANDEEP KUMAR PALATASINGH
63	PRASHANTA KUMAR SUBUDHI	LECTURER	Khordha	Kamala Nehru H.S.S, BBSR	9437413903	PRASHANTA KUMAR SUBUDHI Prashanta 4/2/25
64	Abhisikta Mishra	LECTURER	Khordha	Kshetrabasi D.A.V. Higher Secondary School	7978088167	Abhisikta Mishra
65	SAGARTANAYA SAHOO	LECTURER	Khordha	SISHU ANANTA HIGHER SECONDARY SCHOOL, BALIPATNA	9937946480	
66	DIPTI MAYEE DAS	LECTURER	Khordha	JMBEDKJ CENTENARY HSS OF EDUCATION & TECHNOLOGY DUMUDUMA, BHUBANESWAR 751019	9437932092	diptimayee Das
67	SHAILENDRA KUMAR PARIDA	LECTURER	Khordha	SANATAN HARICHANDAN HIGHER SECONDARY SCHOOL	9938888030	Shailendra Kumar Parida
68	r. Sudhanshu Sekhar Pattnaik	LECTURER	Koraput	Bhairab H.S.S. Borigamma, Koraput	9937663404	S. B. Pattnaik SUDHANSHU SEKHAR PATTNAIK
69	GANGADHAR MAHAPATRA	LECTURER	Nayagarh	S.L.A.H.S.SCHOOL, GODIPADA	9437516691	GANGADHAR MAHAPATRA
70	PRADEEP KUMAR NAYAK	LECTURER	Puri	PURI WOMENS H S SCHOOL PURI	8260540023	Pradeep Kumar Nayak
71	SANJAYA KUMAR DALAI	LECTURER	Puri	KALYANPUR SCIENCE HIGHER SECONDARY SCHOOL	9937217637	SANTAYA KUMAR DALAI
72	DURGA PRASAD TRIPATHY	LECTURER	Puri	SSBG HIGHER SECONDARY SCHOOL, BALIGHAI	9583067568	Durga Prasad Tripathy

ANNEXURE-II

Feedback Report

**Centurion University of Technology and Management**
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN PHYSICS
Feedback Form

Rating scale: 1 (Low) – 10 (High) Date: 06 / 02 / 2025

Name of the Participant : *Dr. Sarna Prava Bhaik.*

Location of Visit: *CUTM* Contact No: *9749743148*

1. Did the program meet your expectations? Please tick (✓) and rate Yes/No
1 2 3 4 5 6 8 9 10

2. What are your take away/key learning points from this program?

(a) *physics in our day-to-day life by and
ben? conductor physics by Dr. K. Jena Sa*

(b) *NEP 2020 by Dr. J. Nayak. Sa.*

(c)

3. Do you wish to share your action plan? Yes/No

4. Would you like to recommend this program to your friends/people you know
 Yes/No
If yes, you want to share the details (optional)
Name of the person:
Email ID: Mobile No.-

5. How do you rate the facilitator on the subject knowledge and depth of understanding.
1 2 3 4 5 6 7 8 9 10

Overall Rating: 1 2 3 4 5 6 7 9 10



Centurion University of Technology and Management
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

**COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN PHYSICS**

Feedback Form

Rating scale: 1 (Low) - 10 (High)

Date: 05 / 02 / 2025

Name of the Participant: *Xunga Prasad Tripathy*

Location of Visit:

Contact No: *9583067468*

1. Did the program meet your expectations? Please tick (✓) and rate Yes/No

1 2 3 4 5 6 7 8 9 10 ✓

2. What are your take away/key learning points from this program?

- (a) *I learnt how to teach the students of elementary level as well as higher level and to motivate the students to step ahead in physical world.*
- (b) *to step ahead in physical world.*
- (c)

3. Do you wish to share your action plan? Yes/No

Yes.

4. Would you like to recommend this program to your friends/people you know
Yes/No

If yes, you want to share the details (optional)

Yes.

Name of the person:

Email ID:

Mobile No.-

5. How do you rate the facilitator on the subject knowledge and depth of understanding.

1 2 3 4 5 6 7 8 9 10 ✓

Overall Rating:

1 2 3 4 5 6 7 8 9 10 ✓

ANNEXURE-III

SDG Reports

Nandita Surla - Kishorenagar College

Sustainability, described as center of the 16 goals of SDGs, indicates peace and prosperity of the people and planet, while tackling climate change and environment. The SDGs set by the United Nations, serves the benchmark for policy makers to identify gaps and proactively action towards achieving the goal of sustainable development by 2030. At the national level SDG India measures national progress on the line of above 16 SDGs by forming 113 indicators, aligned with National Indicator Framework. So

The ^{score of} index which ranges from 0-100, is an indication of progress, with higher score reflecting front-runner and achiever. In the field of inclusive growth and development. In a way it also promotes competitive and cooperative federalism, encouraging states and UTs to learn from each other and close outcome based gaps. As a barometer for measuring progress these indicators has to be also based on local issues, communities and stakeholders to promote institutional ownership, collaborative competition, capacity building and social inclusion approach. Odisha with a score of 58 out of 100 (S.K. Mallick et al 2024) was ranked as a performer state among 16 states. due to its various initiatives done so far in the line of development and inclusive growth.

Assignment - 1.

However the state is lagging behind in many categories. Such as Zero Hunger which needs to be addressed at the local level. The nature of SDG goals call for participation at Public, Pvt and local level, which warrants participation of state level institutions to acquire the Centre stage.

While at the government level the policy has to be framed to achieve better indicators implementation has to be done by private institutions with local participation through PPP mode in a sustainable manner.


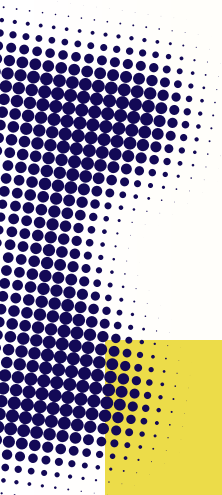
Among all such institutions. One of the private institution acknowledged by govt is Centurion university. which focuses on sustainable and inclusive development by sensitising the local and down trodden population.

The education system imbued in the curriculum promotes skill and employment opportunities, which is (SDG 4) of the 16 indicators. The university is also promoting green energy which is part of (SDG-7). The Sky rider, startup and FRP section is also promoting above with (SDG 8) and (SDG 9) which is development of industry innovation and infrastructure. The apparel unit and experience Centre showcases SDG 10, 11 and 12 which is the main idea behind inclusive growth and reduction of inequality of SDG. The waste to utility Center is promoting (SDG 12) by starting on circular economy. The renewable energy unit is promoting climate action (SDG-13) and promotes climate resilience. The Furniture, and CCC section is also promoting gainful employment along with it's gram tarang Programme.

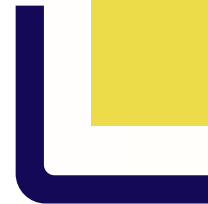
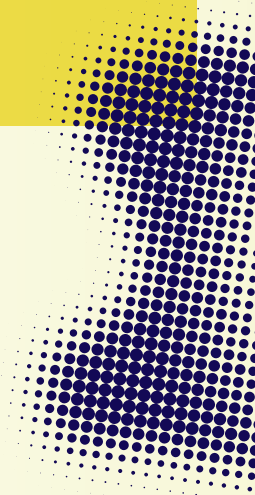
ANNEXURE-IV

Session Plan

Date	9:30 AM - 11:00 AM	11:00 AM - 11:30 AM	11:30 AM - 1:00 PM	1:00 PM - 2:00 PM	2:00 PM - 3:15 PM	3:30 PM - 5:00 PM
4th Feb 2025	Inaugural and Interaction with the Participants	TEA BREAK	Dr. Santosh Kumar Satpathy (About the Department and Faculty Member) / Gyanendra Kumar Mishra (Vedic Charcha)	LUNCH	Campus Visit (SRP/GKM)	
5th Feb 2025	Dr. Saubhagyalaxmi Behera (Emerging Field of Research)		Dr. Sanjaya Suar (KIIT International School)		Bikash Jena (Scientist IMMT) / Subhraj Panda (Nano Materials for Industrial Applications)	Ethics by Prof. KVD Prakash
6th Feb 2025	Dr. Kamalakanta Jena (Assistant Professor, Bhadrak Autonomous College)		Dr. Kamalakanta Jena (Assistant Professor, Bhadrak Autonomous College)		Dr. Nilakanta Panigrahi (Principal, Sai International School)	NEP 2020 (Dr. Ajay Nayak)
7th Feb 2025	Prof. L.P. Singh (Element of Material Structure)		Dr. Suryanarayana Nayak (Neutrino Physics)		Dr. Subrat Sarangi (Universality of Laws of Physics and Methodology of Science)	Dr. Padmaja Patnaik (Skill)
8th Feb 2025	Dr. Prasanta Kumar Parida (Physics and Nature)		Dr. Subraj Panda (Radiosotope and its Applications)		Presentation and Feedback of Participants	Valedictory Function



**SNIPPET ON
TEACHERS' TRAINING PROGRAMME
FOR ZOOLOGY TEACHERS
(PHASE-01)
SPONSORED BY COUNCIL OF HIGHER
SECONDARY EDUCATION (CHSE),
GOVT. OF ODISHA, INDIA**



Facilitators and Presenters

SL. NO.	NAME	POSITION	SUBJECT
1.	PROF. (DR.) MUKTI KANTA MISHRA	(PRESIDENT, CUTM)	THE JOURNEY OF CENTURION UNIVERSITY AND ITS NATURAL ECOSYSTEM
2.	PROF. JAGNESWAR DANDAPAT	PROFESSOR	BODY'S BATTLE: A STRATEGIC GAME OF IMMUNE TROOPS.
3.	PROF. YASHASWI NAYAK	PROFESSOR	INSIGHTS OF ORNAMENTAL FISH IN RESEARCH
4.	DR. ANIL MOHAPATRA	PROFESSOR	DESCRIBING NEW SPECIES WITH SPECIAL REFERENCE TO MARINE FISH: DISCOVERY AND CHALLENGES
5.	DR. PALLAVI MISHRA	PROFESSOR	DNA AS A GENETIC MATERIAL
6.	PROF. SIBA PRASAD PARIDA	PROFESSOR	WILDLIFE PERSPECTIVES IN ODISHA
7.	DR. GAGAN KUMAR PANIGRAHI	PROFESSOR	NONSENSE-MEDIATED MRNA DECAY: A KEY TO POST-TRANSCRIPTIONAL CONTROL
8.	DR. BIKASH RANJAN SAHU	PROFESSOR	FLOW CYTOMETRY: BASICS AND APPLICATIONS
9.	DR. SUNITA SATAPATHY	PROFESSOR	WASTE TO WEALTH
10.	DR. BANDITA RATH	PROFESSOR	RECOMBINANT DNA TECHNOLOGY
11.	DR. AJAY KUMAR NAYAK	PROFESSOR	NEP 2020
12.	DR. ARUNA KUMAR SWAIN	PROFESSOR	PHYSIOLOGY AND IMMUNOLOGY
13.	PROF. KVD PRAKASH	PROFESSOR	ROLE OF ETHICS
14.	DR. PRIYA RANJAN DEBTA	PROFESSOR	ONCOGENE AND TUMOUR SUPPRESSOR GENE
15.	DR. PRADIP KUMAR PRUSTY	PROFESSOR	ROLE OF CRICKET AS A FEED SUPPLEMENT IN AQUACULTURE AND POULTRY

Name of Attendees

SL. NO.	NAME	POSITION	SCHOOL
1	ARPITA SAHOO	LECTURER	DAV HIGHER SECONDARY SCHOOL, MCL ANANTA VIHAR
2	RAGHUNATH BARIK	LECTURER	TTPS HIGHER SECONDARY SCHOOL, NTPC, TALCHER THERMAL
3	SHAIK RAHIMUDDIN	LECTURER	CHANDBALI HIGHER SECONDARY SCHOOL, CHANDBALI
4	JYOTIRMAYEE JENA	LECTURER	BANT ANCHALIKA HIGHER SECONDARY SCHOOL, BANT
5	SATYAPRAVA PANI	LECTURER	CHARAMPA HSS
6	RANJITA MOHALIK	LECTURER	ATAL BIHARI HIGHER SECONDARY SCHOOL
7	RACHITA KAR	LECTURER	SAHEED HSS BARAPUR BHADRAK
8	ANNAPURNA JENA	LECTURER	BALLAVI DEVI MAHILA HIGHER SECONDARY SCHOOL
9	AJITESH SAMAL	LECTURER	CHRIST HIGHER SECONDARY SCHOOL
10	MISS POOJATRANI SAHOO	LECTURER	U.N. H.S. SCHOOL OF SC. & TECH., ADASPUR, CUTTACK
11	AISHAWARYA BHUYAN	LECTURER	BRAHMANJHARILO HIGHER SECONDARY SCHOOL
12	MADHUSMITA PALA	LECTURER	PANCHAYAT PRAHALLAD COLLEGE, NISCHINTAKOILI, CUTTACK
13	DR. SHRADHANJALI PRUSTY	LECTURER	CHOUDWAR JUNIOR COLLEGE
14	MADHUSMITA MOHANTY	LECTURER	O.P.S. H.S. SCHOOL, HINDOL ROAD
15	SWASTIKA MOHANTY	LECTURER	BALIKUDA WOMEN'S HIGHER SECONDARY SCHOOL, BALIKUDA
16	RESHMA SIULI	LECTURER	KUJANG HIGHER SECONDARY SCHOOL
17	PRACHIPRAVA KAR	LECTURER	A.S.H. S, SCHOOL, TIRTOL
18	BIJAYINI PADHIARY	LECTURER	SHREE JAGANNATH HIGHER SECONDARY SCHOOL
19	SUSHREE LIPSA CHAKRA	LECTURER	UNS HSS, KHAIRABAD-MUGPAL, JAIPUR
20	SUJATA BEHERA	LECTURER	M.H.D MAHAVIDYALAYA, CHHATIA
21	SHRI PURNANANDA PARTHASARATHI SANKHUA	LECTURER	ANANDAPUR HIGHER SECONDARY SCHOOL, ANANDAPUR
22	NIRLIPTA PANIGRAHI	LECTURER	GOVT SSD HSS MATKAMBEDA

23	MISS SASMITA PANDA	LECTURER	JATNI HIGHER SECONDARY SCHOOL
24	BISWAJIT HOTA	LECTURER	GOVT SSD GIRLS HIGHER SECONDARY SCHOOL BADAMPAHAR MAYURBHANJ KA-90
25	CHINTU MAHAPATRA	LECTURER	SAI VIDYA MANDIR HSS
26	JAJATI KESHARI MOHANTA	LECTURER	PANCHPIR WOMEN'S HIGHER SECONDARY SCHOOL, KARANJIA
27	KANHU MURMU	LECTURER	GOVT. SCIENCE HIGHER SECONDARY SCHOOL, TIRING
28	PRATAP KESHARI BARAL	LECTURER	KALYANPUR SCIENCE HIGHER SECONDARY SCHOOL
29	HRUDAYA RANJAN SETHI	LECTURER	S.C.S.H.S. SCHOOL, PURI
30	RASHMIREKHA SATPATHY	LECTURER	UPENDRA NATH HSS, SORO
31	SABITA DAS	LECTURER	BAHANAGA HIGHER SECONDARY SCHOOL
32	SAMEEKSHYA PRUSTY	LECTURER	KHAIRA HSS, KHAIRA
33	SHWETA SAMINI	LECTURER	DHAMNAGAR HSS
34	MR. SMRUTI RANJAN MOHAPATRA	LECTURER	AGARPARA HIGHER SECONDARY SCHOOL
35	JYOTIPRAVA MUDULI	LECTURER	MOHAN SUBUDHI HIGHER SECONDARY SCHOOL, BADAMBA
36	SRI RAJESH SENAPATI	LECTURER	D.K.N. H.S. SCHOOL
37	SHYAMLAL BHUE	LECTURER	BANKI HIGHER SECONDARY SCHOOL
38	REEMA DAS	LECTURER	STEWART SCIENCE HIGHER SECONDARY SCHOOL
39	MOUSUMI BAGHA	LECTURER	PARJANG HIGHER SECONDARY SCHOOL, PARJANG
40	BARSA BAISAKHI NAYAK	LECTURER	BALIKUDA HIGHER SECONDARY SCHOOL, BALIKUDA
41	MISS SWAPNA PRIYADARSINI	LECTURER	SVM HIGHER SECONDARY SCHOOL
42	SOMANATH SINGH	LECTURER	SADHU GOURESWAR H.S. SCHOOL
43	SUNIL KUMAR SAHU	LECTURER	BIRAJA WOMEN'S HIGHER SECONDARY SCHOOL JAIPUR TOWN
44	DR. RUTUSMITA MISHRA	LECTURER	GODAVARI HIGHER SECONDARY SCHOOL
45	SAUMYA RANJAN MISHRA	LECTURER	SRI JAGANNATH HIGHER SECONDARY SCHOOL KAIPADAT
46	SMT. HIMANI SETHI	LECTURER	PRANANATH HIGHER SECONDARY SCHOOL
47	PRIYA RANJAN PARIDA	LECTURER	PARAMANANDA HIGHER SECONDARY SCHOOL, BOLGARH
48	ASHISH KUMAR PRADHAN	LECTURER	NILGIRI HIGHER SECONDARY SCHOOL
49	SIBA PRASAD MISHRA	LECTURER	RAVENSHAW HIGHER SECONDARY SCHOOL
50	PRIYADARSINI MUNI	LECTURER	NIMAPARA HIGHER SECONDARY SCHOOL

Introduction

The Zoology Training programme, held from 29th January to 2nd February 2025, at Centurion University of Technology and Management, was a collaborative and intensive initiative to enhance the teaching methodologies and technical expertise of Zoology educators under the Council of Higher Secondary Education (CHSE). This five-day programme was meticulously designed to provide participants with theoretical knowledge and practical exposure to modern zoological science. By incorporating a variety of interactive sessions, hands-on training, and expert-led discussions, the programme sought to empower educators with advanced teaching techniques tailored to contemporary zoology, introduce participants to cutting-edge research and methodologies in zoological sciences, foster a collaborative environment for exchanging ideas and best practices among educators, strengthen participants' capacity to inspire and engage students with innovative approaches.

The programme highlighted the importance of staying updated with scientific advancements in zoology while emphasising practical applications relevant to real-world biological and ecological challenges. It also provided a platform for educators to bridge gaps in traditional teaching methods by integrating modern technologies and methodologies into the CHSE curriculum. This comprehensive training not only aimed to enhance participants' subject knowledge but also equipped them with tools to make zoology a more interactive and engaging subject for their students.

Broad Objectives

The Zoology Training programme was designed with the following primary objectives:

- To empower educators with contemporary knowledge and skills in zoological sciences.
- To enable effective teaching strategies and inspire students in the field of zoology.
- To provide a collaborative platform for exchanging ideas and best practices.
- To foster innovative teaching approaches and bridge gaps between traditional and modern educational methods.

SPECIFIC OBJECTIVES AND LEARNING OUTCOMES SESSION-WISE

Day 1 (29th Jan 2025)

Session 1: Introduction and Interaction with Participants

This opening session aimed to create a welcoming atmosphere and build a positive rapport between participants and facilitators. Activities included introductions and a brief outline of the programme's structure. The facilitators encouraged participants to express their expectations and goals for the programme, fostering a sense of inclusivity. By the end of this session, participants felt comfortable and ready to engage, understanding the collaborative and interactive nature of the training.

Session 2: Body's Battle: A Strategic Game of Immune Troops

This interactive session transformed the complex workings of the immune system into an engaging strategic game. Participants assumed roles as different immune cells, responding to pathogen invasions using coordinated defense strategies. Through role-playing and simulation, they explored immune responses, antigen recognition, and the body's defense mechanisms. The session encouraged teamwork, critical thinking, and a deeper understanding of immunology in a fun and immersive way. Participants gained a clear understanding of immune system functions and defense strategies. The session enhanced their ability to explain immunological concepts engagingly and interactively.

Session 3: Insights of Ornamental Fish in Research

This session explored the significance of ornamental fish in scientific research, highlighting their role in genetics, toxicology, and environmental studies. Participants learnt about various ornamental fish species used as model organisms, their unique physiological traits, and their contributions to biomedical advancements. Discussions covered breeding techniques, water quality management, and ethical considerations in research. The session also emphasised the economic and ecological impact of ornamental fish in the aquaculture industry. Participants gained a deeper understanding of the research applications of ornamental fish. The session equipped them with knowledge on utilizing these species for scientific and educational purposes.

Session 4: Connecting with Nature at Pollinators' Paradise

A field trip to Pollinators' Paradise and the Mini Zoo provided participants with a hands-on experience in understanding biodiversity, animal interactions, and ecosystem dynamics. The mini zoo featured a variety of birds, turtles, cows, rabbits, and turtles, allowing participants to observe their behaviors, adaptations, and roles in ecological balance. A large fish collection showcased aquatic diversity and its significance in ecosystems. Additionally, the visit included insights into sustainable practices such as a vermicompost unit for organic waste management and a honey bee box to study pollination, bee ecology, and honey production. A special moment was witnessing the bond between Calf Mina and her mother, Malati, as Mina learnt survival behaviors. Their relationship reflected maternal care and animal instincts. Participants gained a deeper appreciation of biodiversity and sustainable ecological practices. The session enriched their understanding of animal behavior, pollination, and conservation strategies, helping them integrate these concepts into their zoology curriculum.



Participants during the Campus Tour

Day 2 (30th Jan 2025)

Session 5: Discovery and Challenges in Describing New Marine Fish Species

This session explored the identification of new marine fish species, highlighting the importance of taxonomy, genetics, and deep-sea exploration. It addressed challenges such as cryptic species, habitat loss, climate change, and research limitations. Advanced technologies like DNA barcoding and remote sensing have improved species classification, yet conservation remains a key concern. International collaboration and sustainable management are essential for preserving marine biodiversity. Participants gained an understanding of marine species discovery and its challenges, along with insights into conservation efforts and sustainable biodiversity management.

Session 6: DNA as a Genetic Material

This session explored the role of DNA as the hereditary material, tracing key experiments like Griffith's transformation, Avery-Macleod-McCarty's findings, and the Hershey-Chase experiment. It highlighted the molecular structure of DNA, its replication process, and its significance in gene expression. The discussion also covered advancements in genetic research, including recombinant DNA technology and genome editing. Challenges such as genetic mutations and ethical concerns in genetic engineering were addressed. Participants gained an understanding of DNA's role as genetic material, its experimental proof, and its applications in modern genetics and biotechnology.

Session 7: Wildlife Perspectives in Odisha

This session explored the rich biodiversity of Odisha, covering its diverse ecosystems, including forests, wetlands, and coastal habitats. It highlighted key wildlife species such as the Olive Ridley turtles, Royal Bengal tigers, and Irrawaddy dolphins, along with conservation efforts in national parks and sanctuaries. The discussion addressed threats like habitat destruction, poaching, and climate change, emphasizing the role of government policies and community participation in wildlife conservation. Odisha's ecotourism initiatives and sustainable practices were also examined. Participants gained insights into Odisha's wildlife diversity, conservation challenges, and the importance of sustainable management for ecological balance.



Participants studying about Varieties of Trees and Plants

Session 8: Genomics and Zoology Lab Visit

The visit provided hands-on exposure to genomic research, zoological studies, and aquatic model organisms. In the Genomics Lab, we explored DNA sequencing, genetic markers, and bioinformatics tools. The Zoology section introduced specimen collection, biodiversity studies, and species behavior analysis. At the zebrafish facility, we observed breeding setups, including holding tanks, breeding chambers, and larval rearing systems. Experts highlighted zebrafish as a key model organism in genetics, developmental biology, and biomedical research. This visit deepened our understanding of genomics, zoology, and zebrafish breeding techniques. It provided practical insights into research methods, conservation, and the role of zebrafish in genetic studies.

Day 3 (31st Jan 2025)

Session 9: Nonsense-Mediated mRNA Decay (NMD): A Key to Post-Transcriptional Control

This session explored Nonsense-Mediated mRNA Decay (NMD) as a crucial quality control mechanism that degrades faulty mRNAs containing premature stop codons. It highlighted the molecular mechanisms of NMD, including key proteins like UPF1, UPF2, and UPF3, and their role in maintaining gene expression fidelity. The discussion also covered the physiological importance of NMD in cellular function, its involvement in genetic diseases, and its potential as a therapeutic target. Additionally, recent research advancements and challenges in studying NMD were addressed. Participants gained insights into the significance of NMD in gene regulation, its role in preventing defective protein synthesis, and its implications in genetic disorders and therapeutic strategies.

Session 10: Flow Cytometry – Basics and Applications

This session covered the fundamental principles of flow cytometry, a powerful technique used for analyzing the physical and chemical characteristics of cells and particles. It explained key components, including fluidics, optics, and electronics, along with concepts like fluorescence and gating strategies. The discussion highlighted diverse applications in immunology, hematology, microbiology, and cancer research, emphasizing its role in cell sorting, biomarker detection, and disease diagnostics. Challenges such as data interpretation, instrument calibration, and sample preparation were also addressed. Participants gained an understanding of the working principles of flow cytometry, its applications in biomedical research, and its significance in clinical diagnostics and therapeutic advancements.

Session 11: Paramedics and Pharmacy Lab Visit

The visit to the Pharmacy and Paramedics Lab provided practical exposure to essential medical and pharmaceutical techniques. In the Pharmacy Lab, we explored drug formulation, compounding, and quality control processes. We observed how medications are prepared, tested, and dispensed, ensuring patient safety and efficacy. The Paramedics Lab introduced us to emergency medical procedures, including CPR, first aid, and patient stabilization techniques. Hands-on demonstrations included the use of medical equipment like defibrillators, oxygen masks, and IV administration. This visit enhanced our understanding of pharmaceutical processes and emergency medical care. It provided valuable insights into drug formulation, patient safety, and life-saving paramedic techniques.



Participants visiting Paramedics' Lab

Session 12: Waste to Wealth – Sustainable Resource Management

This session explored the concept of Waste to Wealth, focusing on converting waste materials into valuable resources through recycling, upcycling, and innovative technologies. It covered key waste management strategies, including composting, biogas production, and circular economy approaches. Case studies on industrial waste utilization, plastic recycling, and e-waste management were discussed. The role of government policies, sustainable business models, and community participation in waste valorization was also highlighted. Participants gained insights into sustainable waste management techniques, the economic potential of waste recycling, and the importance of adopting eco-friendly practices for environmental conservation.



Participants visiting Pollinators Paradise

Day 4 (1st Feb 2025)

Session 13: Recombinant DNA Technology

This session explored the fundamentals of Recombinant DNA (rDNA) Technology, which enables the manipulation of genetic material to create modified organisms for various applications. It covered key steps such as gene isolation, vector selection, restriction enzyme digestion, ligation, and transformation into host cells. The discussion highlighted its applications in medicine (gene therapy, insulin production), agriculture (genetically modified crops), and industry (biofuel production, enzyme synthesis). Ethical concerns, biosafety regulations, and challenges in genetic engineering were also addressed. Participants gained an understanding of the principles of rDNA technology, its vast applications in biotechnology, and its significance in advancing healthcare, agriculture, and industrial processes.

Day 4 (1st Feb 2025)

Session 14: NEP 2020

This session focused on the National Education Policy (NEP) 2020, discussed in the context of zoology education. Key components such as interdisciplinary learning, the importance of experiential learning, and the shift towards student-centered approaches were explored. Real-life examples were used to demonstrate how educators could align their teaching methods with NEP guidelines. Participants understood how to integrate NEP 2020 into their teaching practices, promoting a more holistic and engaging educational experience for students.

Session 15: Physiology and Immunology

This session explored the fundamental principles of physiology and immunology, focusing on how the body's systems function and interact with the immune system to maintain homeostasis. Key physiological processes such as circulation, respiration, neural signaling, and metabolism were discussed alongside immune mechanisms like innate and adaptive immunity, antigen recognition, and immune response regulation. The session also covered immune disorders, autoimmune diseases, and the role of vaccines in disease prevention. Advances in immunotherapy and their implications in medical science were highlighted. Participants gained insights into the interconnectedness of physiology and immunology, understanding immune system functions, disease mechanisms, and emerging therapeutic strategies in healthcare.

Session 16: Role of Ethics

Ethics plays a crucial role in guiding individuals and organizations toward making fair, responsible, and morally sound decisions. It helps maintain trust, integrity, and accountability in personal and professional interactions. Ethical principles ensure that actions align with values such as honesty, respect, and justice. In business and society, ethics foster a positive environment, preventing misconduct and promoting social responsibility. This session provided an understanding of ethical principles and their importance in decision-making. It emphasised the impact of ethics on trust, integrity, and responsible behaviour in various aspects of life.

Day 5 (2nd Feb 2025)

Session 17: Oncogenes and Tumor Suppressor Genes

This session explored the critical roles of oncogenes and tumor suppressor genes in cancer development and progression. It covered the molecular mechanisms of oncogene activation, including mutations, gene amplification, and chromosomal translocations, leading to uncontrolled cell proliferation. The function of tumor suppressor genes like p53, RB, and BRCA1/2 in regulating cell cycle checkpoints and apoptosis was discussed. The session also highlighted cancer-causing mutations, hereditary cancer syndromes, and emerging therapeutic approaches such as targeted gene therapy and immunotherapy. Participants gained an understanding of how genetic alterations contribute to cancer, the significance of oncogenes and tumor suppressor genes in tumor formation, and potential strategies for cancer diagnosis, prevention, and treatment.

Session 18: Role of Crickets as a Feed Supplement in the Aqua Industry and Poultry

This session explored the potential of crickets as a sustainable and protein-rich feed supplement in aquaculture and poultry farming. It covered their high nutritional value, including essential amino acids, fatty acids, and micronutrients, making them an efficient alternative to traditional fishmeal and soybean-based feeds. The discussion highlighted benefits such as improved growth performance, better feed conversion ratios, and enhanced immunity in fish and poultry. Challenges like large-scale production, cost-effectiveness, and regulatory considerations were also addressed. Participants gained insights into the nutritional advantages of crickets as a feed supplement, their role in sustainable animal farming, and the prospects of insect-based feed in the aqua and poultry industries.



Participants are visiting the Dairy Farm

Session 19: Presentation and Feedback of Participants

In this session, participants had the opportunity to present their learnings from the programme, showcasing their understanding of the topics covered. They were also encouraged to provide feedback on the programme to help improve future sessions. Participants demonstrated their grasp of the material and offered constructive feedback that could enhance the programme's effectiveness.

Session 20: Valedictory Function

The programme concluded with a formal valedictory session, during which participants reflected on their experiences, shared key takeaways, and received certificates of participation. This was a celebratory occasion, marking the culmination of the programme. Participants left with a sense of accomplishment, ready to apply the knowledge gained to their teaching practices and research in zoology.

Special Session

The Journey of Centurion University and Its Natural Ecosystem

Speaker: Prof. (Dr.) Mukti Kanta Mishra (President, CUTM)

An interactive session on the establishment of Centurion University, biodiversity within the campus, and the role of pollinators in maintaining ecological balance. President Sir shared his inspiring journey of founding Centurion University and its evolution into a multidisciplinary institution. He discussed the presence of diverse tree and shrub species on campus, emphasizing their ecological significance. Participants learnt about the concept of Pollinators' Paradise, an initiative to protect and promote pollinator species like bees and butterflies within the university's green ecosystem. This session provided valuable insights into integrating environmental sustainability with education and research.

Campus Tour

A campus tour of various production units at Centurion University was conducted. This tour was designed to provide participants with insights into the university's diverse and innovative units focused on technology, sustainability, and vocational education. The session spanned from 2:30 pm to 5:00 pm and covered a range of topics such as renewable energy, sustainable practices, paramedic education, and cutting-edge technologies. The following outlines the key highlights and learning outcomes from each session.

Tour Schedule and Learning Outcomes

2:30 pm – 2:45 pm: CDC, Transformer, Waste to Wealth

The first stop of the tour included the CDC (Career Development Centre), the Transformer unit, Waste to Wealth initiative, and WELL (Water, Energy, and Livelihood).

2:45 pm – 3:15 pm: School of Paramedics/Law

A visit to the School of Paramedics and the School of Law provided insights into the educational approaches and technologies used in these disciplines.

3:15 pm – 3:30 pm: Renewable Energy

This session focused on renewable energy solutions implemented at Centurion University, highlighting the role of solar, wind, and other renewable sources in the university's sustainability efforts.

3:30 pm – 3:45 pm: Apparel COE

The Apparel Centre of Excellence (COE) presented innovations in the textile and apparel industry. Participants were shown the latest advancements in fabric production, garment design, and manufacturing techniques. They also explored how the COE fosters skill development in textile production and fashion design, preparing students for the competitive apparel industry.

3:45 pm – 4:00 pm: Experience Centre

The Experience Centre showcased different products being manufactured at the university.



Participants Visiting the Experience Center

4:00 pm – 4:15 pm: ASDC ITI/ITOT/Ashok Leyland/Hyundai, Yamaha

This session highlighted the collaboration between the Automotive Skills Development Council (ASDC) and industry leaders such as Ashok Leyland, Hyundai, and Yamaha. Participants observed the advanced training programmes offered through these collaborations, covering everything from automotive mechanics to customer service. The session emphasised the importance of industry-academia partnerships in developing skilled professionals for the automotive sector.

4:15 pm – 4:30 pm: Future Nexus, AR/VR

Future Nexus, an advanced research unit, introduced participants to the future of AR/VR applications. Participants learnt about the latest trends in AR/VR technologies, including their use in virtual simulations, remote collaboration, and immersive learning. They were shown how these technologies are shaping the future of education and industry applications.

4:30 pm – 5:00 pm: EV, CNC, 3D Printing

This session introduced participants to innovations in electric vehicles (EVs), computer numerical control (CNC) machining, and 3D printing technologies.

Conclusion

The training programme at Centurion University has successfully provided participants with an in-depth and practical understanding of the diverse fields within zoology, biotechnology, and various interdisciplinary technologies. Over the course of several days, participants were exposed to cutting-edge research, innovative practices, and hands-on applications that bridge the gap between theoretical knowledge and real-world implementation. From learning about the National Education Policy 2020 and its alignment with modern educational strategies to exploring advanced animal sciences, genetics, biotechnology, and sustainable practices, participants have gained invaluable insights into both the scientific and practical aspects of their disciplines.

Additionally, the exposure to various production units, including those focused on renewable energy, paramedics, apparel design, and AR/VR technologies, has demonstrated the breadth of knowledge and innovative spirit fostered at Centurion University. The campus tour, especially to production units like the EV, CNC, and 3D printing, further broadened participants' perspectives by highlighting the importance of industry-academia collaborations and the future of emerging technologies.

This training programme not only enhanced the participants' knowledge but also fostered a deeper appreciation for integrating sustainability, innovation, and hands-on learning into their respective fields. It has prepared them to apply these learnings in their own academic or professional settings and make meaningful contributions to their industries. The programme has been an enriching experience that equipped participants with both theoretical foundations and practical skills. We are confident that the insights gained from this training will inspire participants to bring positive changes in their teaching practices, research efforts, and future careers. We extend our sincere thanks to all the facilitators, industry partners, and participants for making this programme a success, and we look forward to seeing the continued application of the knowledge shared throughout this journey.



Participants during the Campus Tour



Participants in the Valedictory Ceremony

ANNEXURE-I

Attendance Sheet

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA

TRAINING PROGRAMME IN ZOOLOGY

ATTENDANCE SHEET

Date: January 29-02 February, 2025

Place: Room No. 18, Aryabhata Building, Cestarian University of Technology and Management (CUTM), Ramachandrapur, Jatni, Bhubaneswar, Odisha

Sl. No.	Name	Designation	District	Name of Higher Secondary School	Phone No.	Signature of Participants (Name in Block Letter)
						29.01.2025
1	Arpita saho	PGT	Angul	DAY HIGHER SECONDARY SCHOOL, MCL ANANTA VIHAR	934947139	ARPITA SAHOO
2	RAGHUNATHI BARIK	PGT	Angul	TTPS HIGHER SECONDARY SCHOOL, NTPC, TALCHER THERMAL	709351873	Raghenabti Barik
3	Shak Ratimuddin	LECTURER	Bhadrak	Chandoli Higher Secondary School, Chandoli	737789123	Shak Ratimuddin
4	jenamayer jena	LECTURER	Bhadrak	Bani chandika Higher secondary school, Jhina	952476299	Jenamayer Jena
5	Satyajyoti Pati	LECTURER	Bhadrak	Charanga HSS	943729229	Satyajyoti Pati
6	Ranjita Mohalik	LECTURER	Bhadrak	Atal Bihari Higher Secondary School	851847564	Ranjita Mohalik
7	RACHITA KAK	LECTURER	Bhadrak	SAHIED HSS BARAFUR BHADRAK	977695066	Rachita Kak
8	Amangana Jena	LECTURER	Cuttack	Baltesh Devi Mahila Higher Secondary School	9429534787	Amangana Jena
9	Ajinkya samal	LECTURER	Cuttack	Chitra Higher Secondary school	9545188143	Ajinkya Samal
10	MISS POGIATRAM SAHOO	PGT	Cuttack	U.N. H.S. SCHOOL OF SC. & TECH, ADARPUK, CUTTACK	700845107	Pogiatram Sahoo
11	Aishwarya Bhujana	LECTURER	Cuttack	Dharamgharia Higher Secondary School	733163970	Aishwarya Bhujana

12	Madhusmita Patra	LECTURER	Cuttack	Panchajanya Pratibha College, Nandakot, Cuttack	7058501346	Madhusmita Patra
13	NIRANJAN PANDA	LECTURER	Cuttack	SUBHADRA MAJAPAR H. S. SCHOOL, ARUNESWAR	706874380	Niranjan Panda
14	Dr. Shradhanjali Prusty	LECTURER	Cuttack	Choudhary Junior College	7846053113	Shradhanjali Prusty
15	Madhusmita Mohanty	LECTURER	Bhubaneswar	O.P.S. H.S. school, Hotali road	829084385	Madhusmita Mohanty
16	SWASTIKA MOHANTY	LECTURER	Jagatsinghpur	BALAKUDA WOMEN'S HIGHER SECONDARY SCHOOL, BALAKUDA	8371229390	Swastika Mohanty
17	RESHMA SINGLI	LECTURER	Jagatsinghpur	KULANG HIGHER SECONDARY SCHOOL	7008548122	Reshma Singli
18	Prachi prava kar	LECTURER	Jagatsinghpur	A. S. S. school, Gatal	8893799814	Prachi prava kar
19	BISAYINI PADHIARY	LECTURER	Jagatsinghpur	SHREE JAGANNATH HIGHER SECONDARY SCHOOL	7954647843	Bisayini padhiary
20	SUBRIZEE LIPSA CHAKRA	LECTURER	Jajpur	UNS HSS, KHARABAD MUGHAL, JAJPUR	953632723	Subrizee Lipsa Chakra
21	MONALISHA NAYAK	LECTURER	Jajpur	BARUNESWAR H.S. SCHOOL	9337123360	Monalisha Nayak
22	SUJATA BEHERA	LECTURER	Jajpur	M. S. 4 Makar-Bidyalaya, Chhatra	940254380	Sujata Behera
23	SHRUTISMITA NAYAK	LECTURER	Jajpur	KHARASROTA HIGHER SECONDARY SCHOOL	8156814727	Shrutismita Nayak
24	Sowmi sathia	LECTURER	Kendrapada	ENG Higher secondary school	963581775	Sowmi Sathia
25	Shri Purnananda Parthasarathi Sankha	LECTURER	Kendrapada	Anandapur Higher Secondary School, Anandapur	7088753819	Purnananda Parthasarathi Sankha
26	SAENKITA SETHY	LECTURER	Kendrapada	PANCHAYAT SAMITI COLLEGE, BHEMPURA	9851417183	Saenkita Sethy
27	NIRLIPTA PANIGRAHI	PGT	Kendrapada	GOVT SSD HSS MATKAMBEDA	931876291	Nirlipta Panigrahi
28	PRABHAT KUMAR SAHOO	LECTURER	Khordha	80-TECH HIGHER SECONDARY SCHOOL	911871891	Prabhat Kumar Sahoo

29	Ush Narayan Patra	JR LECTURER	Khordha	Beguna Higher secondary school, Beguna	876315629	
30	Bhagyalaxmi Das	LECTURER	Khordha	MAHARISHI HIGHER SECONDARY SCHOOL OF NATURAL LAW, BHUBANESHWAR	9428123009	
31	Anur Kumar Sahoo	LECTURER	Khordha	AMBEDKAR CENTENARY HSS OF EDUCATION & TECHNOLOGY, DUMKODANA, BHUBANESHWAR-751019	9337120912	
32	SIFRA NAYAK	LECTURER	Khordha	SIDHU ANANTA HIGHER SECONDARY SCHOOL, BALUPATNA	898982365	
33	Sree Manasrajya Patra	LECTURER	Khordha	Ekamaa Higher Secondary School	9437631670	
34	Miss Saantra Panda	LECTURER	Khordha	JATNI Higher Secondary School	9938109997	Saantra Panda
35	BIDWAJIT HOITA	JR LECTURER	Mayurbhanj	GOVT SSD GIRLS HIGHER SECONDARY SCHOOL, BADAMPALHAR, MAYURBHANJ KA-98	7088477105	Bidwajit Hoita
36	CHENTU MAHAAPATRA	JR LECTURER	Mayurbhanj	DAI VIDYA MAHAR HSS	773824908	Chintu Mahapatra
37	JAJATI KESHARI MOHANTA	LECTURER	Mayurbhanj	PANCHIYA WOMEN'S HIGHER SECONDARY SCHOOL, KARANJA	9772218841	Jajati Keshari Mohanta
38	KANHU MURMU	PGT	Mayurbhanj	GOVT. SCIENCE HIGHER SECONDARY SCHOOL, TIRUNG	9348549394	Kanhu Murmu
39	PRADIP KESHARI BARAL	LECTURER	Puri	KALIYANPUR SCIENCE HIGHER SECONDARY SCHOOL	8618294981	Pradip Keshari Baral
40	IBELDITA RANJAN SETHI	PGT	Puri	S.C.S.H.SCHOOL, PURI	9439404347	Hrudaya Ranjan Sethi
41	KASHINIRKSHA SATPATHY	LECTURER	Balasore	LEEDERA NATHI HSS, SOBO	7006150028	Kashiniraksha Satapathy
42	SABITA DAS	LECTURER	Balasore	BARANAGA HIGHER SECONDARY SCHOOL	708828783	Sabita Das
43	SANDEEKSHYA PRUSTY	LECTURER	Balasore	KHURA HSS, KHURA	7261483225	Sandeekshya Prusty
44	SHWETA SAMINI	LECTURER	Bhubani	DHAMNAGAR HSS	9347765607	Shweta Samini
45	Ms Sneha Ranjan Mahapatra	LECTURER	Bhubani	Agarpara Higher Secondary School	8118492817	Sneha Ranjan Mahapatra

46	JYOTIPRANA MUDALI	LECTURER	Cuttack	MEHAN SUDHAKR HIGHER SECONDARY SCHOOL, BADAMBA	775224644	Jyotiprana Mudali
47	Sri Rajesh Senapati	LECTURER	Cuttack	D.K.N. H.S. School	8370711948	Rajesh Senapati
48	ARCHANA PATI	JR LECTURER	Cuttack	SHAKTI HIGHER SECONDARY SCHOOL	8917509978	
49	Shyamsil Bhae	LECTURER	Cuttack	Baali Higher Secondary School	8988660099	Shyamsil Bhae
50	REEMA DAS	LECTURER	Cuttack	STEWART SCIENCE HIGHER SECONDARY SCHOOL	9778136292	Reema Das
51	MOUSUMI BAGHA	LECTURER	Bhubaneswar	PARJANG HIGHER SECONDARY SCHOOL, PARJANG	9358942815	Mousumi Bagha
52	BARSA BASAKSHI NAYAK	LECTURER	Jagatsinghpur	BALIKUDA HIGHER SECONDARY SCHOOL, BALIKUDA	9114879908	Barsha Basakshi Nayak
53	Miss Sneha Priyadarini	LECTURER	Jagatsinghpur	SVM Higher Secondary School	8370229890	Sneha Priyadarini
54	Somasath Singh	LECTURER	Jajpur	Saibu Goutam H.S. School	9348208237	Somasath Singh
55	Sunit Kumar Saha	LECTURER	Jajpur	Biraja women's Higher secondary school Jajpur Town	9438264743	Sunit Kumar Saha
56	Dr. Rubanama Mishra	LECTURER	Khordha	Gudavais Higher Secondary School	7856993959	Rubanama Mishra
57	Geetanjali Mishra	JR LECTURER	Khordha	JI Jaganath higher secondary school kapadar	7078096147	SAUMYA RANJAN MISHRA
58	SMIT HIMANI SETHI	LECTURER	Khordha	PRANANATHI HIGHER SECONDARY SCHOOL	9622154464	Smit Himani Sethi
59	PREYA BANJAN PARIDA	LECTURER	Khordha	Parmananda Higher Secondary School, Balugaon	9938222228	Preya Banjan Parida
60.	SIDA PRASAD MISHRA	PAT	CUTTACK	RAVEN SHAN H.S.S, CUTTACK	8917927304	Sida Prasad Mishra
	PRIYADARSINI MUNI	Asst. Puri	Nimapara H.S. School, Nimapara, Puri	9888862173		Priyadarini Muni
	Abhishek Kumar Boudhan	Lecturer	Balasore	NELGESITH.S. School,	8763212603	Abhishek Kumar Boudhan

29	Ush Nayan Pathi	JR LECTURER	Khorha	Begonia Higher secondary school, Begonia	876375629	
30	Bhagwati Das	LECTURER	Khorha	MAHARISHI HIGHER SECONDARY SCHOOL OF NATURAL LAW, BHUBANESHWAR	943812309	
31	Anur Kumar Sahoo	LECTURER	Khorha	AMBEDKAR CENTENARY HSS OF EDUCATION & TECHNOLOGY, JUMHEDONA, BHUBANESHWAR-751019	9337120912	
32	SIFRA NAYAK	LECTURER	Khorha	SERU ANANTA HIGHER SECONDARY SCHOOL, BALUPATNA	898982365	
33	Sree Manasraj Patra	LECTURER	Khorha	Ekana Higher Secondary School	9437631676	
34	Miss Saantra Panda	LECTURER	Khorha	JATNI Higher Secondary School	9938109997	Saantra Panda
35	BIDWAJIT HOITA	JR LECTURER	Mayurbhanj	GOVT SSD GIRLS HIGHER SECONDARY SCHOOL, BADAMPARAH, MAYURBHANJ KA-98	7688471105	Bidwajit Hoita
36	CHENTU MAHAIPATRA	JR LECTURER	Mayurbhanj	DAI VIDYA MANDIR HSS	9738324908	Chintu Mahapatra
37	JAJATI KESHARI MOHANTA	LECTURER	Mayurbhanj	PANCHIYA WOMEN'S HIGHER SECONDARY SCHOOL, KARANJA	9772218841	Jajati Keshari Mohanta
38	KANHU MURMU	PGT	Mayurbhanj	GOVT. SCIENCE HIGHER SECONDARY SCHOOL, TIRUNG	9348549394	Kanhu Murmu
39	PRADIP KESHARI BARAL	LECTURER	Puri	KALIYANPUR SCIENCE HIGHER SECONDARY SCHOOL	8618294981	Pradip Keshari Baral
40	IBRULATA RANDAN SETHI	PGT	Puri	S.C.S.H.S.SCHOOL, PURI	9439040437	Ibrulata Randan Sethi
41	KASHINIRKSHA SATPATHY	LECTURER	Balasore	LEENDRA NATHI HSS, SOBO	7006130028	Kashiniraksha Satpathy
42	SABITA DAS	LECTURER	Balasore	BARANAGA HIGHER SECONDARY SCHOOL	769828783	Sabita Das
43	SANDEEKSHITA PRUSTY	LECTURER	Balasore	KHURA HSS, KHURA	7261483225	Sandeekshita Prusty
44	SHWETA SAMINI	LECTURER	Bhubani	DHANNAGAR HSS	9347956067	Shweta Samini
45	Ms Sneha Ranjan Mahapatra	LECTURER	Bhubani	Agarpara Higher Secondary School	8818492817	Sneha Ranjan Mahapatra

46	PYOTIPRANA MUDULI	LECTURER	Cuttack	MEHAN SUDHAKR HIGHER SECONDARY SCHOOL, BADAMBA	775234644	Jyotiprana Muduli
47	Sri Rajesh Senapati	LECTURER	Cuttack	D.K.N. H.S. School	8370711948	Rajesh Senapati
48	ARCHANA PATI	JR LECTURER	Cuttack	SHAKTI HIGHER SECONDARY SCHOOL	8917509978	
49	Shyamal Bhae	LECTURER	Cuttack	Baali Higher Secondary School	8988660099	Shyamal Bhae
50	REEMA DAS	LECTURER	Cuttack	STEWART SCIENCE HIGHER SECONDARY SCHOOL	9778136292	Reema Das
51	MOLUSING BAGHA	LECTURER	Bhubaneswar	PARJANG HIGHER SECONDARY SCHOOL, PARJANG	9338942815	Molusing Bagha
52	BARSA BASAKSHI NAYAK	LECTURER	Jagatsinghpur	BALIKUDA HIGHER SECONDARY SCHOOL, BALIKUDA	9114879908	Barsa Basakshi Nayak
53	Miss Sneha Priyadarini	LECTURER	Jagatsinghpur	SVM Higher Secondary School	8370237890	Sneha Priyadarini
54	Somanath Singh	LECTURER	Jajpur	Baibu Goutam H.S. School	9348302837	Somanath Singh
55	Sonal Kumar Sahu	LECTURER	Jajpur	Biraja women's Higher secondary school Jajpur Town	9438264743	Sonal Kumar Sahu
56	Dr. Rubanama Mishra	LECTURER	Khorha	Gudawan Higher Secondary School	7856993959	Rubanama Mishra
57	Geetanjali Mishra	JR LECTURER	Khorha	JI Jagatsingh higher secondary school kapadar	7878099147	SAHAYA RANJAN MISHRA
58	SMT. HIMANI SETHI	LECTURER	Khorha	PRANANATH HIGHER SECONDARY SCHOOL	9622144464	Himani Sethi
59	PREYA BANJAN PARIJA	LECTURER	Khorha	Parmananda Higher Secondary School, Baliganj	9938322228	Preya Banjan Parida


60. SIDA PRASAD MISHRA PGT CUTTACK RAVEN SHAN H.S.S, CUTTACK 8917927304 Sida Prasad Mishra

PRIYADARSINI MISHRA Lect. Puri Nimarpada H.S. School. 9668862173 Priyadarini Mishra

Abhishek Kumar Boudhan Lecturer Balasore Nalgeri H.S. School. 8763212603 Abhishek Kumar Boudhan

ANNEXURE-II

Feedback Report

 **Centurion University of Technology and Management**
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN ZOOLOGY
Feedback Form

Rating scale: 1 (Low) - 10 (High) Date: 31 / 01 / 2025

Name of the Participant: Ninlita Dasgupta

Location of Visit: _____ Contact No: 9938790291

1. Did the program meet your expectations? Please tick (✓) and rate Yes/No
1 2 3 4 5 6 7 8 9 10


2. What are your take away/key learning points from this program?
(a) NMD and the central Dogma class by Gagan Sin was very inspinable and valuable to me. His way of it interactⁿ was really awesome.
(b) _____
(c) Waste management and awareness class is very beneficial and it should be passed to our students by which awareness spread and they can be able to use the tricks.

3. Do you wish to share your action plan? Yes/No _____

4. Would you like to recommend this program to your friends/people you know
Yes/No _____
If yes, you want to share the details (optional)
Name of the person: _____
Email ID: _____ Mobile No.: _____

5. How do you rate the facilitator on the subject knowledge and depth of understanding.
1 2 3 4 5 6 7 8 9 10

Overall Rating: 1 2 3 4 5 6 7 8 9 10

 **Centurion University of Technology and Management**
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN ZOOLOGY
Feedback Form

Rating scale: 1 (Low) - 10 (High) Date: 01 / 02 / 2025

Name of the Participant: Machusmita Mohanty

Location of Visit: Centurion University, Jatni Contact No: 9936579779
8593284305

1. Did the program meet your expectations? Please tick (✓) and rate Yes/No
1 2 3 4 5 6 7 8 9 10 (✓)

2. What are your take away/key learning points from this program?
(a) Knowledge about recombinant DNA Technology.
(b) Have a knowledge of how to build the ecosystem for students.
(c) Ethical values as a human being is important rather than gender.

3. Do you wish to share your action plan? Yes/No _____

4. Would you like to recommend this program to your friends/people you know
Yes/No _____
If yes, you want to share the details (optional)
Name of the person: _____
Email ID: _____ Mobile No.: _____

5. How do you rate the facilitator on the subject knowledge and depth of understanding.
1 2 3 4 5 6 7 8 9 10 (✓)

Overall Rating: 1 2 3 4 5 6 7 8 9 10 (✓)



Centurion University of Technology and Management
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN ZOOLOGY

Feedback Form

Rating scale: 1 (Low) - 10 (High) Date: 01 / 02 / 2025

Name of the Participant: Nirbitta Barigrahi

Location of Visit: Contact No: 9932790691

1. Did the program meet your expectations? Please tick (✓) and rate Yes/No
1 2 3 4 5 6 7 8 9 10

2. What are your take away/key learning points from this program?

- (a) R. D. T By Bandita mam was very good and its very valuable to us.
- (b) NEP Gave some ideas regarding present education system.
- (c) Physiology and Immunology by Anil Sir was got best his forensic experience was really found interesting.

3. Do you wish to share your action plan? Yes/No

4. Would you like to recommend this program to your friends/people you know
Yes/No

If yes, you want to share the details (optional)

Name of the person:

Email ID: Mobile No.-

5. How do you rate the facilitator on the subject knowledge and depth of understanding.

1 2 3 4 5 6 7 8 9 10

Overall Rating: 1 2 3 4 5 6 7 8 9 10



Centurion University of Technology and Management
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN ZOOLOGY

Feedback Form

Rating scale: 1 (Low) - 10 (High) Date: 30 / 01 / 2025

Name of the Participant: SIBA PRASAD MISHRA

Location of Visit: Contact No: 7205772797
9717424700 (w)

1. Did the program meet your expectations? Please tick (✓) and rate Yes/No
1 2 3 4 5 6 7 8 9 10

2. What are your take away/key learning points from this program?

- (a) TAXONOMY - , How to describe new species
- (b) DNA- STR- History
- (c) Wildlife conservatⁿ, different types

3. Do you wish to share your action plan? Yes/No

I want to ask in a very polite way has our department has any provision and facilities base up in the research on project stud

4. Would you like to recommend this program to your friends/people you know
Yes/No

If yes, you want to share the details (optional)

Name of the person:

Email ID: Mobile No.-

5. How do you rate the facilitator on the subject knowledge and depth of understanding.

1 2 3 4 5 6 7 8 9 10

Overall Rating: 1 2 3 4 5 6 7 8 9 10



Centurion University of Technology and Management
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN ZOOLOGY

Feedback Form

Rating scale: **1 (Low) - 10 (High)** Date: 30 / 01 / 2025
Name of the Participant: **PRİYADARSINI MUNI**
Location of Visit: Contact No: **9668862173**

- Did the program meet your expectations? Please tick (✓) and rate Yes/No
1 2 3 4 5 6 7 8 9 **10**
- What are your take away/key learning points from this program?
(a) *Explanation on Eel by Dr. Apil Monapatna was Outstanding.*
(b) *Idea on Biodiversity by Dr. Siba Prasad Parita was too good and enriching.*
(c) *Keypoints highlighted by Dr. Pallavi Mishra was needful.*
- Do you wish to share your action plan? Yes/No
- Would you like to recommend this program to your friends/people you know
Yes/No
If yes, you want to share the details (optional)
Name of the person:
Email ID: Mobile No.:
- How do you rate the facilitator on the subject knowledge and depth of understanding.
1 2 3 4 5 6 7 8 9 **10**

Overall Rating: 1 2 3 4 5 6 7 8 9 **10**

Council of Higher Secondary Education, Odisha
Feedback Form

5 day Teachers' Training Programme

Name of the Participant with Address: Rajesh Samapati, D.K.S. College, Esanch, Cuttack
Subject: Zoology
Date of the Programme: 29.1.2025 to 2.2.2025

(Instruction: Just mark by circle where ever you find appropriate)

CONTENT

Was the training interesting? Yes No
Was the contents understandable? Yes No
Was there clarity in the content? Yes No

STRUCTURE

(Rate from 1-5 where 1 being the least)
How was the focus of the experts good? 1 2 3 **4** 5
How far you found the lecture useful? 1 2 **3** 4 5
How far did the lecturer meet your expectations? 1 2 3 **4** 5
What struck you about this Training Programme?

PRESENTATION

(Rate from 1-5 where 1 being the least)
How far the programme managed to capture your attention? 1 2 **3** 4 5
How did you find the contents/ experiments useful? 1 2 **3** 4 5
How far audience participation & interaction encouraged? 1 2 **3** 4 5
How far the lecturer appeared enthusiastic about the subjects? 1 2 **3** 4 5

OVERALL

Whether you are satisfied with the Programme Yes No
Whether the lectures able to answer your questions? Yes No
What is your overall impression about the Training Programme? Good Average Ok
Do you feel the training will be useful in your classroom teaching? Yes No

How do you plan to implement the experience gained here?
Inspire student for higher study & diversity. also NEP

What suggestions do you have to give for improvement?
Workshop & practical demonstration should have done here.

Rajesh Samapati
Signature

Council of Higher Secondary Education, Odisha
Feedback Format

5 day Teachers' Training Programme

Name of the Participant with Address: Somwati Ranjan Mohapatra, Agarpada College, Agarpada, Bhubaneswar.

Subject: Zoology

Date of the Programme: 29.01.2025 to 02.02.2025

(Instruction: Just mark by circle where ever you find appropriate)

CONTENT

Was the training interesting? Yes No
 Was the contents understandable? Yes No
 Was there clarity in the content? Yes No

STRUCTURE

(Rate from 1-5 where 1 being the least)
 How was the focus of the experts good? 1 2 3 4 5
 How far you found the lecture useful? 1 2 3 4 5
 How far did the lecturer meet your expectations? 1 2 3 4 5
 What struck you about this Training Programme?

PRESENTATION

(Rate from 1-5 where 1 being the least)
 How far the programme managed to capture your attention? 1 2 3 4 5
 How did you find the contents/ experiments useful? 1 2 3 4 5
 How far audience participation & interaction encouraged? 1 2 3 4 5
 How far the lecturer appeared enthusiastic about the subjects? 1 2 3 4 5

OVERALL

Whether you are satisfied with the Programme Yes No
 Whether the lectures able to answer your questions? Yes No
 What is your overall impression about the Training Programme? Good Average Ok
 Do you feel the training will be useful in your classroom teaching Yes No

How do you plan to implement the experience gained here?
Provide students for higher studies full of plenty of scopes and opportunities.
 What suggestions do you have to give for improvement?
It would have been better if there is some practical exposure, hands on training programme.

Somwati Ranjan Mohapatra
Signature

Council of Higher Secondary Education, Odisha
Feedback Format

5 day Teachers' Training Programme

Name of the Participant with Address: Prachi Prava Kaur, A.S.H.S. School, Tribel, J.S Pur

Subject: Leeterean (zoology)

Date of the Programme: 29.01.2025 to 2.02.25

(Instruction: Just mark by circle where ever you find appropriate)

CONTENT

Was the training interesting? Yes No
 Was the contents understandable? Yes No
 Was there clarity in the content? Yes No

STRUCTURE

(Rate from 1-5 where 1 being the least)
 How was the focus of the experts good? 1 2 3 4 5
 How far you found the lecture useful? 1 2 3 4 5
 How far did the lecturer meet your expectations? 1 2 3 4 5
 What struck you about this Training Programme?

PRESENTATION

(Rate from 1-5 where 1 being the least)
 How far the programme managed to capture your attention? 1 2 3 4 5
 How did you find the contents/ experiments useful? 1 2 3 4 5
 How far audience participation & interaction encouraged? 1 2 3 4 5
 How far the lecturer appeared enthusiastic about the subjects? 1 2 3 4 5

OVERALL

Whether you are satisfied with the Programme Yes No
 Whether the lectures able to answer your questions? Yes No
 What is your overall impression about the Training Programme? Good Average Ok
 Do you feel the training will be useful in your classroom teaching Yes No

How do you plan to implement the experience gained here?
practical application seek mentorship, connect with alumni etc.
 What suggestions do you have to give for improvement?

Academic Enhancement, strategic Partners ship, Research activation and student support, technology integration etc.

Prachi Prava Kaur
Signature

ANNEXURE-III

Session Plan

Schedule for Zoology Teachers Training Program Under CHSE @ CUTM						
Date	9:30AM -11:00 AM	11.00AM-11.30 AM	11:30AM-1:00 PM	1:00PM-2:00PM	2:00PM-3:15 PM	3:30PM-5:00 PM
29.01.2025	Interaction with the Participants	TEA BREAK	Prof. Jagneswar Dandapat (Body's battle: A strategic game of immune troops.	LUNCH BREAK	Prof. Yashaswi Nayak (Insights of Ornamental Fish in Research)	Visit to Pollinators Paradise
30.01.2025	Dr. Anil Mohapatra, Scientist ZSI (Describing new species with special reference to marine fish: Discovery and Challenges)		Dr. Pallavi Mishra (DNA as a genetic material)		Prof. Siba Prasad Parida (Wildlife Perspectives in Odisha)	Genomics and Zoology Lab Visit
31.01.2025	Dr. Gagan Kumar Panigrahi (Nonsense-mediated mRNA decay: A key to post-transcriptional Control)		Dr. Bikash Ranjan Sahu (Flow cytometry: Basics and Applications)		Paramedics and Pharmacy Lab Visit	Dr. Sunita Satapathy (Waste to Wealth)
01.02.2025	Dr. Bandita Rath(Recombinant DNA Technology)		Dr. Ajay Kumar Nayak Pro-VC (NEP 2020)		Dr. Aruna Kumar Swain (Physiology and Immunology)	Prof. KVD Prakash (Role of Ethics) and Visit to Experience Center
02.02.2025	Dr. Priya Ranjan Debta (Oncogene and Tumor suppressor gene)		Dr. Pradip Kumar Prusty (Role of Cricket as a feed supplement in Aquaculture and Poultry)		Presentation and Feedback of Participants	Valedictory Function

ANNEXURE-IV

SDG Reports

I. Haudaya Ranjan Satti, PGT in Zoology from S.C.S HS School, Puri participated in the 5 day Teachers' Training Programme in Zoology organised at CUTM, Jactani, Bhubaneswar from 29/01/2025 to 02/02/2025.

The overall training experience in this University was great. We learnt many valuable lessons from different speakers from different districts of Odisha. We visited the following places during our training programme.

- Pollinator Paradise - An ecologically designed habitat to conserve various flora & fauna
- Terracotta lab - waste materials are repurposed into valuable products by eco-friendly methods
- Production lab - Sustainable Skill development centric university - It emphasises skill based education through its production lab.

We also visited other places Apparel Manufacturing unit, Experiential Center, Ayurveda wellness center, Central Panomedical Laboratories, Zoology Laboratories & many more.

During the training program, we had opportunity to interact with esteemed dignitaries, CUTM staffs and a virtual session with Mukti sir, founder of CUTM.

Finally I really enjoyed the 5 day training program and I will definitely use the valuable lessons to my classroom teaching.

Haudaya Ranjan Satti
PGT in Zoology
S.C.S HS, Puri
Ph: 9429404047

In lessons, they are making things from clay, soil & mud. Along with this they also make things from waste material like paper. It directly approaches the sustainable development, where every waste can be reused to make a useful thing.

Talking about the production lab, they are making transformers, Furniture, Electric vehicles, Dress, Hydroponics, milk etc. This provides a great opportunity for the student to develop their skill. Also it help the student to become an entrepreneur in their field.

In addition to all these things, other eye catching things are the Lord Jagannath & all the symbols of different religions around him is just wonderful concept. Other things are Yoga center, to lead a healthy & fit life, Ayurveda center, vegetable farming unit etc.

Interaction with the Posve, President Sir are the memorable moment for us. Their actions & dedication are reflected through their speech & the other thing of the University.

Along with the education, they ensure about the skill development, maintenance of natural ecosystem, zero pollution, hygiene & creating jobs for different people in different units. The great initiatives are highly appreciable & inspiring for other institution.

I'll definitely try to apply all these things in the education system.

I really grateful to the CHSE for organizing the training program which has developed a lot in me as a teacher & I would like to suggest the CHSE to organize such thing in a regular interval.

I have a great experience here in certain Universities

Jyotiparna Madala
Lect. in Zoology
M.S. College, Badamba.

reducing waste, directly supporting SDG 12 (Responsible Consumption and Production)

Production Lab (Hands On Learning for Sustainability)

The production labs at Centurion University provide practical exposure to sustainable agriculture, manufacturing and technology. These labs focus on innovative, eco-friendly solution and skill based education, aligning with SDG 8 (Decent work and Economic growth) and SDG 9 (Industry, Innovation Infrastructure). Here all the learning process is practical based and very informative.

I am glad to say that, I am happy to visit this place. This place is very beautiful just like an artist paint in a canvas. At last I can say Centurion - A paradise in Odisha. My heartfelt gratitude to CRST for organising such training programme at Centurion University.

Ranjita Mohalik
Lecturer in Zoology

Atal Bihari College, Bhubaneswar.
Bhubaneswar, Odisha.

- x -

CRST conducted a training programme in Centurion University, Jatni, Bhubaneswar. This place is not less than paradise. One can feel the presence of mother nature & center of positive energy. The university has taken remarkable steps towards sustainability through its Pollinator Paradise, Terracotta Lab (Waste to Wealth) and Production Lab. The initiatives align with global sustainability goals and provide practical learning, nature's beauty to the feet of students and visitors, make a beautiful ecosystem.

Pollinator Paradise - A Biodiversity Heaven -

Pollinator Paradise is a mesmerised place. One will forget all stress and tension just by walking for few minutes. This place is full of different plants, buzzing bees and other insects, chirping birds, a beautiful cactus garden that have very beautiful flowers. Near about 300 plants, 97 species of butterflies, bees, a wide variety of flowers, turtles, fishes, oysters, Dogs, Cows, Birds, Squirrels (they are very friendly) and many more animals make this place just like heaven.

It is initiatives step for maintaining green environment, conserving nature and agriculture. It reinforced my understanding SDG 15 (Life on Land) and importance of ecological balance.

Terracotta Lab (Waste to Wealth Action) -

The Terracotta lab was equally fascinating, where waste materials are creatively transformed into beautiful and functional terracotta products. Watching artisans made various eco-friendly items from natural clay was inspiring. It highlights how sustainable practices can generate livelihoods while

The university has embraced the framework of skill integrated higher education (SDG 4). The university practices learning at action learning labs and production centres. The production centres helps in manufacturing goods and also engages students in better learning. The production centres includes waste to wealth production unit where the waste materials such as kitchen waste, cowdung are getting converted into manure.

- (ii) Apparel manufacturing units manufacture apparel for the university also exports across India and outside India.
- (iii) Terracotta lab
- (iv) Wood engineering production centre
- (v) Bio-fertilizer production unit etc.

With all these units demonstrates creative and sustainable practice at the university (SDG 12, SDG 9). The exposure visit of the university was an eye opener for all the participants. It showcases the determination of faculties, students & staffs of the university towards practicing & achieving sustainability with every possible way.

The university also consists of green facilities such as sewage Treatment Plant (STP), E-vehicle production & Aquariums for fishes such as koel. All the education facilities & practice in the university are created for quality education focusing on the sustainable developmental goals. From the lush green campus to utilizing the dead leaves again for manufacturing the same plants through biochar process defines the university's determination to practice 5R's, responsible consumption & production & sustainability.

The programme proved to be an enriching experience for me & for all the participants. The blend of theoretical knowledge & practical exposure to sustainable practice made the training particularly relevant and impactful. My heartfelt gratitude to CRST, Odisha and Centurion University for their providing me this opportunity to learn more and deeper on the subject.

Moumita Bagla
lect in Zoology
Pasjany Mahavidyalaya,
Pasjany, Dhenkanal

Name - Miss Reema D
Designation - Lecturer in Zoology
Institution - St. Xavier's college, etc.

As a CRST trainee teacher, I had the privilege of visiting Centurion University, Jatni, Bhubaneswar, where I witnessed innovative practices that align with the sustainable Development Goals (SDGs). The visit included a tour to visit Pollinator Paradise. This unique initiative is more than just a beautiful garden, it is a living testament to the university's commitment to SDGs and biodiversity conservation.

Pollinator Paradise is a meticulously designed habitat that supports a diverse range of pollinators like birds, butterflies, insects, etc. These pollinators are essential for the reproduction of many flowering plants making them vital for ecosystem health & human well-being. Pollinator Paradise is an educational hub. Students from various disciplines including biology, environmental science & agriculture, visit the garden to study different aspects and their role in ecosystem. The university conducts workshops and training sessions to educate students and the local community about sustainable practices.

Centurion University actively involves everyone in its sustainability initiatives. Through Pollinator Paradise, the university conducts outreach programs to educate farmers about the benefits of pollinators. This collaboration helps bridge the gap between the academic research & practical application, fostering a culture of sustainability in the region.

The visit also included a tour of the Terracotta Lab and the Production Labs, both of which are remarkable examples of sustainable development.

SDGs: Pollinators Paradise & Teracota Lab.


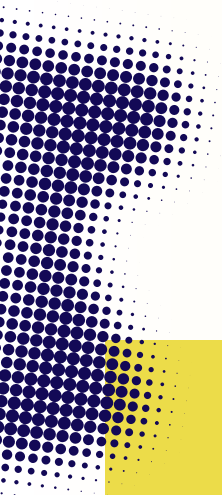
Sustainable development goals is a holistic approach that seeks to balance economic growth, environmental stewardship, & social equity, ensuring that the needs of the present are met without compromising the ability of future generations to meet their own needs. This framework comprises 17 interconnected goals aimed at addressing global challenges such as poverty, inequality, climate change & peace.

Pollinators paradise is an initiative that emphasizes the importance of protecting pollinator species, which are crucial for maintaining biodiversity & supporting food production systems around the globe. It is a pillar of sustainable development that highlights the interconnectedness of ecosystem health and human well-being, advocating for practices that safeguard pollinators while promoting sustainable agricultural methods. This initiative not only raises awareness about the challenges faced by pollinators but also encourages community involvement & policy changes that foster a healthier environment for both wildlife & people.

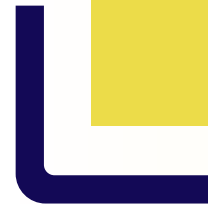
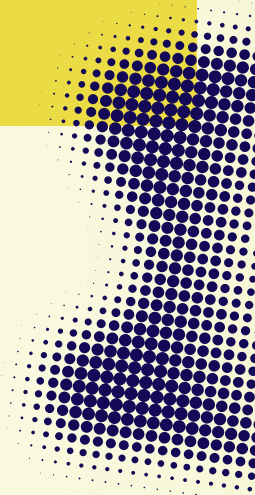
Teracota lab is an important part of sustainable development as it focuses on innovative solutions that integrate creativity, technology with ecological practices, aiming to enhance resource efficiency & reduce environment impact in various sectors. By leveraging cutting-edge research & collaboration with local communities, Teracota lab seeks to create scalable models that can be created for ecosystem & agricultural productivity.

At the end I would like to express my heartfelt thanks to CHSE for coming up with such a praiseworthy initiative to bring Zoology lectures from all across the state to interact, learn & grow. Thanks and grateful.

— Madhusmita Pale.
Lecturer in Zoology.
P.P. College / H.S. School
N. Kuili,
Cuttack.
ODISHA.



SNIPPET ON
TEACHERS TRAINING PROGRAM FOR
ZOOLOGY TEACHERS
(PHASE-02)
SPONSORED BY COUNCIL OF HIGHER
SECONDARY EDUCATION (CHSE)
GOVT. OF ODISHA, INDIA



Facilitators and Presenters

SL. NO.	NAME	POSITION	SUBJECT
1	PROF. YASHASWI NAYAK	PROFESSOR	INSIGHTS OF ORNAMENTAL FISH IN RESEARCH
2	DR. B. DIVYA SRI	PROFESSOR	NA
3	PROF. SUBASINI PATNAIK	PROFESSOR	AN OVERVIEW OF THE IMMUNE SYSTEM
4	DR. B. JAYA MADHURI	PROFESSOR	WASTE TO WEALTH
5	DR. SUNITA SATAPATHY	PROFESSOR	WASTE TO WEALTH
6	DR. AVINASH PALLI	PROFESSOR	ROLE OF CRICKET AS A FEED SUPPLEMENT IN AQUA INDUSTRY AND POULTRY
7	DR. PRADIP KUMAR PRUSTY	PROFESSOR	ROLE OF CRICKET AS A FEED SUPPLEMENT IN AQUA INDUSTRY AND POULTRY
8	DR. BIKASH RANJAN SAHU	PROFESSOR	FLOW CYTOMETRY: BASICS AND APPLICATIONS
9	DR. ARUNA KUMAR SWAIN	PROFESSOR	PHYSIOLOGY AND IMMUNOLOGY
10	DR. SURENDRA NATH SETHY	PROFESSOR	CELL CYCLE AND REGULATION
11	DR. RAM PRASAD PANDA	PROFESSOR	ANIMAL TISSUE

Name of Attendees

SL. NO.	NAME	POSITION	SCHOOL
1	BISWAJIT KESHARI BISWAL	LECTURER	ANCHALIKA HIGHER SECONDARY SCHOOL TALMUL
2	SMT. ROJALI SETHY	LECTURER	D.A.V. H.S. SCHOOL, TITILAGARH
3	PUJA RANI RATH	LECTURER	PS HIGHER SECONDARY SCHOOL
4	MANAS KUMAR MOHAPATRA	LECTURER	REMUNA HIGHER SECONDARY SCHOOL, REMUNA
5	SHANTANU KUMAR SAHU	LECTURER	BIJEPUR H S SCHOOL BIJEPUR
6	PRADEEPTA KUMAR NAYAK	LECTURER	RAGHUNATHJEW HIGHER SECONDARY SCHOOL, DEULASAH, CUTTACK
7	PRAHALLAD KUMAR NAIK	LECTURER	SATCHIDANANDA HIGHER SECONDARY SCHOOL, INDIPUR, DHENKANAL
8	JITENDRA MUDULI	LECTURER	GOVT.(SSD) HIGHER SECONDARY SCHOOL, RAYAGADA,GAJAPATI
9	DR. PRADIPTA KUMAR SARANGI	LECTURER	INDIRA MEMORIAL HIGHER SECONDARY SCHOOL, CHANDIPUT
10	SAMAPIKA TRIPATHY	LECTURER	SCIENCE HIGHER SECONDARY SCHOOL, KONKORADA
11	NIRUPAMA KANDAGORI	LECTURER	SRI BHARAT PATI HIGHER SECONDARY SCHOOL, SAMANTIAPALLI
12	RUDRAMADHAB MOHANTY	LECTURER	N.B.C HSS, KENDUPADAR
13	DR. SISIR KUMAR NAYAK	LECTURER	ANCHALIKA SCIENCE HIGHER SECONDARY SCHOOL BALIPADAR GANJAM
14	SWAYAN PRABHA SAHU	LECTURER	SCIENCE HIGHER SECONDARY SCHOOL PUDAMARI
15	MANOJA KUMAR SAHU	LECTURER	BARTINI SCIENCE HIGHER SECONDARY SCHOOL
16	SRI PRASANTA KUMAR CHOUDHURY	LECTURER	SAHEED BHAGAT SINGH HSS, KHANDADEULI
17	AJAY KUMAR SWAIN	LECTURER	BAYA ABADHUT HIGHER SECONDARY SCHOOL, KANIMUL
18	DEBENDRA MEHER	LECTURER	PANCHAYAT SAMITI HIGHER SECONDARY SCHOOL, KOKSARA
19	THABIRA NAIK	LECTURER	ANCHALIKA BASTARANI H S SCHOOL
20	KIRAN KUMAR DAS	LECTURER	VIKASH H.S. SCHOOL BHAWANIPATNA
21	MOUSUMI MALLIK	LECTURER	GOVT. (SSD) HIGHER SECONDARY SCHOOL, KUDUTULI, K. NUAGAON
22	HIMANSU CHARAN SAHU	LECTURER	ADIVASI HIGHER SECONDARY SCHOOL, BALLIGUDA

23	CHANDRA MOHAN MAJHI	LECTURER	GOVT.(SSD) HIGHER SECONDARY SCHOOL, RANAPATULI
24	DURGA MADHAB DASH	LECTURER	BIJU PATNAIK HIGHER SECONDARY SCHOOL, KUNDRA KORAPUT
25	USHA PRADHAN	LECTURER	SINDHADEVI HIGHER SECONDARY SCHOOL NANDAPUR
26	ITISHREE MAHARANA	LECTURER	SUNABEDA WOMEN'S HIGHER SECONDARY SCHOOL
27	SASANKA SEKHAR PATNAIK	LECTURER	GOVT(SSD)H.S.S. GOVINDAPALLY, MALKANGIRI
28	DR. HIMANSU SEKHAR SAHU	LECTURER	R.D.S. HIGHER SECONDARY SCHOOL, KUNDABAI
29	DEEPAK KUMAR GIRI	LECTURER	GOURISHANKAR HSS, KHADIASOLE
30	AJIT KUMAR BEHERA	LECTURER	KRUSHNACHANDRAPUR HIGHER SECONDARY SCHOOL
31	SITARAM MAHARANA	LECTURER	RAJSUNAKHALA HIGHER SECONDARY SCHOOL
32	PRASANTA KUMAR PANDA	LECTURER	R S HIGHER SECONDARY SCHOOL, ODAGAON
33	SRI SAROJ KUMAR MISHRA	LECTURER	NEELAMADHAB HIGHER SECONDARY SCHOOL, KANTILO
34	ANANTA CHARAN BARIK	LECTURER	SSBG HIGHER SECONDARY SCHOOL, BALIGHAI
35	PRATIMA BURH	LECTURER	ISPAT HIGHER SECONDARY SCHOOL
36	KALPANA DALEI	LECTURER	DALMIA HIGHER SECONDARY SCHOOL, RAJANGPUR
37	ANITA SETHI	LECTURER	GOVT.(.SSD) HIGHER SECONDARY SCHOOL, GOPNA
38	POMAMANI HANSDAH	LECTURER	GOVERNMENT SCIENCE HIGHER SECONDARY SCHOOL KUTRA
39	MISS BASANTI HEMBRAM	LECTURER	MUNICIPAL HIGHER SECONDARY SCHOOL, ROURKELA, SUNDARGARH ODISHA
40	PRANAYA KUMAR MAHANANDA	LECTURER	VEDVYAS HIGHER SECONDARY SCHOOL
41	MADHUSMITA NANDA	LECTURER	PANCHAYAT COLLEGE, KANTAMAL
42	MADHUSMITA SINGH	LECTURER	GOVT. (SSD) HSSGURUNDIA, SUNDARGARH
43	DEEPALI KUJUR	LECTURER	SGG HSS, ROURKELA
44	CHIDANANDA LENKA	LECTURER	GOVT. (SSD) HIGHER SECONDARY SCHOOL, BURJA, KORAPUT
45	NEELANCHAL RATH	LECTURER	HILL-TOP HSS, MOHANA

Introduction

The Zoology Training programme, held from 5th February to 9th February 2025, at Centurion University of Technology and Management, was a collaborative and intensive initiative to enhance the teaching methodologies and technical expertise of Zoology educators under the Council of Higher Secondary Education (CHSE). This five-day programme was meticulously designed to provide participants with theoretical knowledge and practical exposure to modern zoological science. By incorporating a variety of interactive sessions, hands-on training, and expert-led discussions, the programme sought to empower educators with advanced teaching techniques tailored to contemporary zoology, introduce participants to cutting-edge research and methodologies in zoological sciences, foster a collaborative environment for exchanging ideas and best practices among educators, and strengthen participants' capacity to inspire and engage students with innovative approaches.

The programme highlighted the importance of staying updated with scientific advancements in zoology while emphasising practical applications relevant to real-world biological and ecological challenges. It also provided a platform for educators to bridge gaps in traditional teaching methods by integrating modern technologies and methodologies into the CHSE curriculum. This comprehensive training not only aimed to enhance participants' subject knowledge but also equipped them with tools to make zoology a more interactive and engaging subject for their students.

Broad Objectives

The Zoology Training programme was designed with the following primary objectives:

- To empower educators with contemporary knowledge and skills in zoological sciences.
- To enable effective teaching strategies and inspire students in the field of zoology.
- To provide a collaborative platform for exchanging ideas and best practices.
- To foster innovative teaching approaches and bridge gaps between traditional and modern educational methods.

SPECIFIC OBJECTIVES AND LEARNING OUTCOMES SESSION-WISE

Day 1 (5th Feb 2025)

Session 1: Introduction and Interaction with Participants

This opening session aimed to create a welcoming atmosphere and build a positive rapport between participants and facilitators. Activities included introductions and a brief outline of the programme's structure. The facilitators encouraged participants to express their expectations and goals for the programme, fostering a sense of inclusivity. By the end of this session, participants felt comfortable and ready to engage, understanding the collaborative and interactive nature of the training.

Session 2: Basics of Zoology

The session on Basics of Zoology was designed to enhance the understanding of fundamental zoological concepts. It covered key topics such as animal classification, anatomy, evolution, biodiversity, and conservation. The session emphasised the importance of zoology in scientific research, medicine, and environmental sustainability. Teachers were equipped with knowledge and strategies to effectively integrate zoological concepts into their curriculum. By the end of the session, participants gained a deeper understanding of zoology and its applications in education. They developed clarity on animal classification, evolution, and biodiversity conservation. The session empowered them to incorporate modern zoological knowledge into their teaching methods effectively.

Session 3: Insights of Ornamental Fish in Research

This session explored the significance of ornamental fish in scientific research, highlighting their role in genetics, toxicology, and environmental studies. Participants learnt about various ornamental fish species used as model organisms, their unique physiological traits, and their contributions to biomedical advancements. Discussions covered breeding techniques, water quality management, and ethical considerations in research. The session also emphasised the economic and ecological impact of ornamental fish in the aquaculture industry. Participants gained a deeper understanding of the research applications of ornamental fish. The session equipped them with knowledge on utilizing these species for scientific and educational purposes.

Session 4: Introduction to Veterinary Science

This session explored a comprehensive understanding of animal health, disease prevention, and treatment. Participants explored key disciplines such as anatomy, physiology, pathology, pharmacology, and surgery. The session highlighted the vital role veterinarians played in ensuring food safety, controlling zoonotic diseases, and contributing to public health. Additionally, it covered aspects beyond pet care, including livestock management, wildlife conservation, and biomedical research. Advancements in veterinary science were discussed, emphasizing their impact on both animal and human well-being. Participants acquired foundational knowledge of veterinary principles and animal health management. They recognized the significant contributions of veterinarians to public health, agriculture, and medical research. Furthermore, they developed a deeper appreciation for the ethical responsibilities and welfare considerations involved in veterinary practice.

Day 2 (6th Feb 2025)

Session 5: An Overview of the Immune System

This session explored the body's defense mechanism that protects against infections, diseases, and harmful substances. It consists of specialized cells, tissues, and organs that identify and neutralize pathogens like bacteria, viruses, and fungi. The immune system has two main types: innate immunity, which provides immediate but non-specific protection, and adaptive immunity, which develops specific responses and memory against pathogens. Key components include white blood cells, lymphoid organs (spleen, thymus, and lymph nodes), and antibodies. Maintaining a strong immune system through proper nutrition, exercise, sleep, and vaccinations is essential for overall health. By the end of the session, participants understood the structure and function of the immune system. They gained knowledge of immune responses, disorders, and ways to strengthen immunity. The session emphasised the importance of immunity in disease prevention and overall well-being.

Session 6: Waste to Wealth – Sustainable Resource Management

This session explored the concept of Waste to Wealth, focusing on converting waste materials into valuable resources through recycling, upcycling, and innovative technologies. It covered key waste management strategies, including composting, biogas production, and circular economy approaches. Case studies on industrial waste utilization, plastic recycling, and e-waste management were discussed. The role of government policies, sustainable business models, and community participation in waste valorization was also highlighted. Participants gained insights into sustainable waste management techniques, the economic potential of waste recycling, and the importance of adopting eco-friendly practices for environmental conservation.

Day 3 (7th Feb 2025)

Session 7: Fisheries and Aquaculture

This session explored fisheries and aquaculture sectors that contribute to global food security, economic growth, and environmental sustainability. These industries provide a significant source of protein, livelihoods for millions, and support biodiversity conservation efforts. Advancements in aquaculture have led to sustainable fish farming practices, reducing pressure on wild fish populations. Fisheries management includes regulations to prevent overfishing and maintain ecological balance. Challenges such as pollution, climate change, and habitat destruction impact these sectors, making sustainable practices and technological innovations crucial for their future. By the end of the session, learners gained an understanding of fisheries and aquaculture, including their importance in food production and economic development. They learnt about sustainable practices, challenges, and advancements in the field. The session emphasised the need for responsible fisheries management and innovative aquaculture techniques to ensure long-term sustainability.

Session 8: Entomology

The session on Entomology focused on the scientific study of insects, their classification, biology, and ecological significance. Insects play crucial roles in pollination, decomposition, and maintaining ecological balance, making them essential to biodiversity and agriculture. The session covered topics such as beneficial insects like bees and silkworms, harmful pests, and sustainable pest management strategies like Integrated Pest Management (IPM) and biological control. It also explored the role of insects in medicine and forensic science, highlighting their impact on human health and environmental sustainability. Participants gained a comprehensive understanding of entomology, its applications in various fields, and the importance of conserving insect biodiversity for a balanced ecosystem.

Session 9: Fisheries Lab Visit

The visit to the Fisheries Lab provided an insightful experience into the study of aquatic organisms, fish farming, and sustainable fisheries management. During the visit, participants observed various laboratory techniques used to analyse fish health, water quality, and breeding practices. The lab showcased advanced equipment for monitoring aquatic environments, testing for diseases, and conducting research on fish nutrition and genetics. Experts explained the importance of fisheries in food production, conservation, and economic development, emphasizing sustainable practices to prevent overfishing and habitat destruction. This visit enhanced understanding of modern aquaculture techniques and the role of scientific research in improving fisheries management and sustainability.

Session 10: Role of Crickets as a Feed Supplement in Aqua Industry and Poultry

This session explored the potential of crickets as a sustainable and protein-rich feed supplement in aquaculture and poultry farming. It covered their high nutritional value, including essential amino acids, fatty acids, and micronutrients, making them an efficient alternative to traditional fishmeal and soybean-based feeds. The discussion highlighted benefits such as improved growth performance, better feed conversion ratios, and enhanced immunity in fish and poultry. Challenges like large-scale production, cost-effectiveness, and regulatory considerations were also addressed. Participants gained insights into the nutritional advantages of crickets as a feed supplement, their role in sustainable animal farming, and the future prospects of insect-based feed in the aqua and poultry industries.

Day 4 (8th Feb 2025)

Session 11: Flow Cytometry – Basics and Applications

This session covered the fundamental principles of flow cytometry, a powerful technique used for analyzing the physical and chemical characteristics of cells and particles. It explained key components, including fluidics, optics, and electronics, along with concepts like fluorescence and gating strategies. The discussion highlighted diverse applications in immunology, hematology, microbiology, and cancer research, emphasizing its role in cell sorting, biomarker detection, and disease diagnostics. Challenges such as data interpretation, instrument calibration, and sample preparation were also addressed. Participants gained an understanding of the working principles of flow cytometry, its applications in biomedical research, and its significance in clinical diagnostics and therapeutic advancements.

Session 12: Physiology and Immunology

This session explored the fundamental principles of physiology and immunology, focusing on how the body's systems function and interact with the immune system to maintain homeostasis. Key physiological processes such as circulation, respiration, neural signaling, and metabolism were discussed alongside immune mechanisms like innate and adaptive immunity, antigen recognition, and immune response regulation. The session also covered immune disorders, autoimmune diseases, and the role of vaccines in disease prevention. Advances in immunotherapy and their implications in medical science were highlighted. Participants gained insights into the interconnectedness of physiology and immunology, understanding immune system functions, disease mechanisms, and emerging therapeutic strategies in healthcare.

Session 13: Cell Cycle and Regulation

After completing the session on the cell cycle and its regulation, participants gained a clear understanding of the stages of the cell cycle, including interphase (G1, S, G2) and mitotic phase (mitosis and cytokinesis). They explored key regulatory mechanisms involving cyclins, cyclin-dependent kinases (CDKs), and checkpoint pathways that ensure proper cell division. The session also covered the significance of cell cycle control in growth, development, and tissue repair, as well as its role in preventing diseases such as cancer. Additionally, participants learnt about external and internal factors influencing cell cycle progression and arrest. Participants acquired a strong foundation in the mechanisms governing cell cycle regulation. They recognized the importance of checkpoints in maintaining genomic stability and preventing uncontrolled cell proliferation. Furthermore, they gained insights into how dysregulation of the cell cycle contributes to diseases and how targeted therapies can help in medical treatments.

Session 14: Fishery Lab Visit (RAS Unit)

During the fishery lab visit to the Recirculating Aquaculture System (RAS) unit, participants gained practical exposure to advanced aquaculture technology. They observed the functioning of RAS, including water filtration, biofiltration, oxygenation, and waste removal processes that ensure optimal water quality for fish culture. The visit highlighted the benefits of RAS, such as high stocking density, efficient water usage, and sustainable fish farming with minimal environmental impact. Additionally, participants learnt about species selection, feeding strategies, and disease management within the RAS setup. As a result of this visit, participants developed a deeper understanding of modern aquaculture techniques and their role in sustainable fish production. They recognized the significance of water quality management and biosecurity measures in maintaining fish health and productivity. Furthermore, they gained insights into the economic and environmental advantages of RAS in meeting the growing demand for aquatic food resources.

Day 5 (9th Feb 2025)

Session 15: Biotechnology Lab Visit (Animal Cell Culture Lab)

During the visit to the Animal Cell Culture Lab, participants were introduced to fundamental and advanced cell culture techniques. They observed the preparation of culture media, sterilization processes, and aseptic handling techniques required for successful cell growth. The visit covered different types of cell cultures, including primary cultures, cell lines, and stem cells, along with essential procedures such as incubation, passaging, and cryopreservation. As a result of this visit, participants gained a deeper understanding of the applications of animal cell culture in biotechnology and medical research. They recognized its significance in drug development, vaccine production, and regenerative medicine. Additionally, they became aware of biosafety measures, ethical considerations, and the importance of maintaining contamination-free environments in cell culture studies.

Session 16: Animal Tissue

After completing the session on animal tissue, participants gained a comprehensive understanding of the structure, types, and functions of different animal tissues. They explored the four main types: epithelial tissue, which covers body surfaces and lines organs; connective tissue, which supports and binds structures (including bone, blood, and cartilage); muscular tissue, responsible for movement through contraction; and nervous tissue, which facilitates communication and coordination through nerve impulses. The session emphasised the role of these tissues in maintaining body functions, growth, and repair. Participants developed foundational knowledge of tissue organization in animals and its significance in physiology and pathology. They recognized how different tissues contribute to organ function and overall health. Furthermore, they gained insights into the applications of tissue studies in medical research, diagnostics, and regenerative medicine.

Session 17: Presentation and Feedback of Participants

In this session, participants had the opportunity to present their learnings from the programme, showcasing their understanding of the topics covered. They were also encouraged to provide feedback on the programme to help improve future sessions. Participants demonstrated their grasp of the material and offered constructive feedback that could enhance the programme's effectiveness.

Session 18: Valedictory Function

The programme concluded with a formal valedictory session, during which participants reflected on their experiences, shared key takeaways, and received certificates of participation. This was a celebratory occasion, marking the culmination of the programme. Participants left with a sense of accomplishment, ready to apply the knowledge gained to their teaching practices and research in zoology.

Conclusion

The training programme at Centurion University has successfully provided participants with an in-depth and practical understanding of the diverse fields within zoology, biotechnology, and various interdisciplinary technologies. Over the course of several days, participants were exposed to cutting-edge research, innovative practices, and hands-on applications that bridge the gap between theoretical knowledge and real-world implementation. From learning about the National Education Policy 2020 and its alignment with modern educational strategies to exploring advanced animal sciences, genetics, biotechnology, and sustainable practices, participants have gained invaluable insights into both the scientific and practical aspects of their disciplines.

Additionally, the exposure to various production units has demonstrated the breadth of knowledge and innovative spirit fostered at Centurion University. This training programme not only enhanced the participants' knowledge but also fostered a deeper appreciation for integrating sustainability, innovation, and hands-on learning into their respective fields. It has prepared them to apply these learnings in their own academic or professional settings and make meaningful contributions to their industries.

The programme has been an enriching experience that equipped participants with both theoretical foundations and practical skills. We are confident that the insights gained from this training will inspire participants to bring positive changes in their teaching practices, research efforts, and future careers. We extend our sincere thanks to all the facilitators, industry partners, and participants for making this programme a success, and look forward to seeing the continued application of the knowledge shared throughout this journey.

Glimpses



Participants during Campus Tour at CUTM, Paralakhemundi Campus



Participants during Valedictory Ceremony

ANNEXURE-I

Attendance Sheet

1

SDG

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA				
TRAINING PROGRAMME IN ZOOLOGY				
ATTENDANCE SHEET				
Place: Centurion University of Technology and Management (CUTM),				
Village: Alluri Nagar, R Sitapur,				
Sl.No	DATE	NAME	PHONE NO.	SIGNATURE
1	07/02/2025	JITENDRA MUDULI	9583120345	Jitendra Muduli
2	07/02/2025	DR. SISIR KUMAR NAYAK	9853788188	Dr. Sisir Kumar Nayak
3	07/02/2025	DR. HIMANSU SEKHAR SAHU	7008087430	Dr. Himansa Sekh Sahu
4	07/02/2025	DEEPAK KUMAR GIRI	8260622359	Deepak Kumar Giri
5	07/02/2025	DR. SAROJ KUMAR MISHRA	9556865646	Dr. Saroj Kumar Mishra
6	07/02/2025	MANAS KUMAR MOHAPATRA	8658440401	Manas Kumar Mohapatra
7	07/02/2025	PRAHALLAD KUMAR NAIK	7077139332	Prahallad Kumar Naik
8	07/02/2025	DR. PRADIPTA KUMAR SARANGI	9437986186	Pradipta Kumar Sarangi
9	07/02/2025	KALPANA DALEI	7978189868	Kalpna Dalei
10	07/02/2025	PRATIMA BURH	8984298466	Pratima Burh
11	07/02/2025	AJIT KUMAR BEHERA	9437665664	Ajit Kumar Behera
12	07/02/2025	BASANTI HEMBRAM	9337508711	Basanti Hembram
13	07/02/2025	PRANAYA KUMAR MAHANANDA	9692472462	Pranaya Kumar Mahananda
14	07/02/2025	SHANTANU KUMAR SAHU	9938367324	Shantanu Kumar Sahu


SDG

15	07/02/2025	KIRAN KUMAR DASH	7008126116	Kiran Kumar Dash
16	07/02/2025	MANOJA KUMAR SANU	7735403747	Manoja Kumar Sanu
17	07/02/2025	SAMAPIKA TRIPATHY	8658103831	Samapika Tripathy
18	07/02/2025	DURGA MADHAB DASH	9439561232	Durga Madhab Dash
19	07/02/2025	ANANTA CHARAN BARIK	9937160603	Ananta Charan Barik
20	07/02/2025	AJAY KUMAR SWAIN	7978665810	Ajay Kumar Swain
21	07/02/2025	PRASANTA KUMAR CHOUDHARY	9861164464	Prasant Kumar Choudhary
22	07/02/2025	HIMANSU CHARAN SAHU	9437330697	Himansu Charan Sahu
23	07/02/2025	CHANDRA MOHAN MAJHI	7064117677	Chandra Mohan Majhi
24	07/02/2025	MADHUSMITA NANDA	8637288427	Madhusmita Nanda
25	07/02/2025	MOUSUMI MALLIK	9124828656	Mousumi Mallik
26	07/02/2025	ANITA SETHI	6370627909	Anita Sethi
27	07/02/2025	MADHUSMITA SINGH	9348034446	Madhusmita Singh
28	07/02/2025	DEEPALI KUJUR	7894542452	Deepali Kujur
29	07/02/2025	POMAMANI HANSDAH	9348340077	Pomamani Hansdah
30	07/02/2025	DEBENDRA MEHER	7978060953	Debendra Meher
31	07/02/2025	THABIRA NAIK	8917274129	Thabira Naik
32	07/02/2025	PRASANT KUMAR PANDA	9439867891	Prasant Kumar Panda
33	07/02/2025	CHIDANANDA LENKA	6370111932	Chidananda Lenka
34	07/02/2025	SASANKA SEKHAR PATNAIK	9668363944	Sasanka Sekhar Patnaik

35	07/02/2025	SITARAM MAHARANA	6372124122	Sitaram Maharana
36	07/02/2025	NIRUPAMA KANDAGORI	7978148792	Nirupama Kandagori
37	07/02/2025	ITISHREE MAHARANA	8327794672	Itishree Maharana
38	07/02/2025	USHA PRADHAN	9438212811	Usha Pradhan
39	07/02/2025	PUJA RANI RATH	7978741382	Puja Rani Rath
40	07/02/2025	NEELANCHAL RATH	9777404065	Neelanchal Rath
41	07/02/2025	ROJALI SETHY	9777260486	Rojali Sethy
42	07/02/2025	RUDRAMADHAB MOHANTY	8658999891	Rudramadhab Mohanty
43	07/02/2025	PRADEEPTA KUMAR NAYAK	9939452121	Pradepta Kumar Nayak
44	07/02/2025	SWAYAN PRABHA SAHU	9861136681	Swayan Prabha Sahu
45	07/02/2025	PRASHANT KESHARI BISWAL	9437142436	Prashant Keshari Biswal
46	07/02/2025			
47	07/02/2025			
48	07/02/2025			
49	07/02/2025			
50	07/02/2025			

ANNEXURE-II

Feedback Report

 **Centurion University of Technology and Management**
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN ZOOLOGY
Feedback Form

Rating scale: 1 (Low) - 10 (High) Date: 05 / 02 / 2025

Name of the Participant : DURGA MADHAB DASH

Location of Visit: _____ Contact No: 9439561232

1. Did the program meet your expectations? Please tick (✓) and rate Yes/No
1 2 3 4 5 6 7 8 9 10


2. What are your take away/key learning points from this program?
(a) Basics of Zoology
(b) Insights of ornamental fish in research
(c) Introduction to Veterinary Science

3. Do you wish to share your action plan? Yes/No ✓

4. Would you like to recommend this program to your friends/people you know
Yes/No
If yes, you want to share the details (optional)
Name of the person: _____
Email ID: _____ Mobile No.- _____

5. How do you rate the facilitator on the subject knowledge and depth of understanding.
1 2 3 4 5 6 7 8 9 10

Overall Rating: 1 2 3 4 5 6 7 8 9 10

 **Centurion University of Technology and Management**
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN ZOOLOGY
Feedback Form

Rating scale: 1 (Low) - 10 (High) Date: 06 / 02 / 2025

Name of the Participant : KALPANA DALEI

Location of Visit: _____ Contact No: 9778189868

1. Did the program meet your expectations? Please tick (✓) and rate Yes/No
1 2 3 4 5 6 7 8 9 10

2. What are your take away/key learning points from this program?
(a) An overview of The Immune system
(b) Waste to wealth
(c) _____

3. Do you wish to share your action plan? Yes/No ✓

4. Would you like to recommend this program to your friends/people you know
Yes/No
If yes, you want to share the details (optional)
Name of the person: _____
Email ID: _____ Mobile No.- _____

5. How do you rate the facilitator on the subject knowledge and depth of understanding.
1 2 3 4 5 6 7 8 9 10

Overall Rating: 1 2 3 4 5 6 7 8 9 10

Centurion University of Technology and Management
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN ZOOLOGY
Feedback Form

Rating scale: 1 (Low) - 10 (High) Date: 07/02/2025

Name of the Participant: Swayan Prabha Sahu

Location of Visit: Contact No: 9861136681

- Did the program meet your expectations? Please tick (✓) and rate Yes/No
1 2 3 4 5 6 7 8 9 10
- What are your take away/key learning points from this program?
(a) Fisheries and Aquaculture
(b) Entomology
(c) Role of cricket as a feed supplement to Aquaculture and Poultry
- Do you wish to share your action plan? Yes/No
- Would you like to recommend this program to your friends/people you know
Yes/No
If yes, you want to share the details (optional)
Name of the person:
Email ID: Mobile No.:-
- How do you rate the facilitator on the subject knowledge and depth of understanding.
1 2 3 4 5 6 7 8 9 10

Overall Rating: 1 2 3 4 5 6 7 8 9 10

Centurion University of Technology and Management
Ramachandrapur, Jatni, Bhubaneswar, Odisha 752050

COUNCIL OF HIGHER SECONDARY EDUCATION, ODISHA
TRAINING PROGRAMME IN ZOOLOGY
Feedback Form

Rating scale: 1 (Low) - 10 (High) Date: 08/02/2025

Name of the Participant: PUJA RANI RATH

Location of Visit: Contact No: 797874138

- Did the program meet your expectations? Please tick (✓) and rate Yes/No
1 2 3 4 5 6 7 8 9 10
- What are your take away/key learning points from this program?
(a) Flow cytometry
(b) Physiology and Immunology
(c) Cell cycle and regulation
- Do you wish to share your action plan? Yes/No
- Would you like to recommend this program to your friends/people you know
Yes/No
If yes, you want to share the details (optional)
Name of the person:
Email ID: Mobile No.:-
- How do you rate the facilitator on the subject knowledge and depth of understanding.
1 2 3 4 5 6 7 8 9 10

Overall Rating: 1 2 3 4 5 6 7 8 9 10

Council of Higher Secondary Education, Odisha
Feedback Format

5 day Teachers' Training Programme

Name of the Participant with Address: Shishree Moharana, from Sunabada Women's H.S. Secondary School, SADS

Subject: Zoology

Date of the Programme: 05/02/2025 to 09/02/2025

(Instruction: Just mark by circle where ever you find appropriate)

CONTENT

Was the training interesting ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Was the contents understandable ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Was there clarity in the content ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

STRUCTURE
(Rate from 1-5 where 1 being the least)

How was the focus of the experts good ?	1	2	3	4	<u>5</u>
How far you found the lecture useful ?	1	2	3	4	<u>5</u>
How far did the lecturer meet your expectations ?	1	2	3	4	<u>5</u>

What struck you about this Training Programme ? Field study tours and the classes by Professor

PRESENTATION
(Rate from 1-5 where 1 being the least)

How far the programme managed to capture your attention ?	1	2	3	4	<u>5</u>
How did you find the contents/ experiments useful ?	1	2	3	4	<u>5</u>
How far audience participation & interaction encouraged ?	1	2	3	4	<u>5</u>
How far the lecturer appeared enthusiastic about the subjects?	1	2	3	4	<u>5</u>

OVERALL

Whether you are satisfied with the Programme	Yes ✓	No	
Whether the lectures able to answer your questions ?	Yes ✓	No	
What is your overall impression about the Training Programme ?	Good ✓	Average	Ok
Do you feel the training will be useful in your classroom teaching	Yes ✓	No	

How do you plan to implement the experience gained here ? I will implement this experience by sharing with my students

What suggestions do you have to give for improvement ?
① This type of program organised for students who are in collage
② Choose some students from different collage so that it will help them to develop new techniques and skill for future.

Signature: Shishree Moharana

Council of Higher Secondary Education, Odisha
Feedback Format

5 day Teachers' Training Programme

Name of the Participant with Address: Sasanka Sekhar Patnaik, PGT (Zoology), Govt. (SAD) Higher Secondary School, Govindapur, Malkangiri

Subject: Zoology

Date of the Programme: 05/02/2025 to 09/02/2025

(Instruction: Just mark by circle where ever you find appropriate)

CONTENT

Was the training interesting ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Was the contents understandable ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Was there clarity in the content ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

STRUCTURE
(Rate from 1-5 where 1 being the least)

How was the focus of the experts good ?	1	2	3	4	<u>5</u>
How far you found the lecture useful ?	1	2	3	4	<u>5</u>
How far did the lecturer meet your expectations ?	1	2	3	4	<u>5</u>

What struck you about this Training Programme ? Field study tours and the classes by Professor.

PRESENTATION
(Rate from 1-5 where 1 being the least)

How far the programme managed to capture your attention ?	1	2	3	4	<u>5</u>
How did you find the contents/ experiments useful ?	1	2	3	4	<u>5</u>
How far audience participation & interaction encouraged ?	1	2	3	4	<u>5</u>
How far the lecturer appeared enthusiastic about the subjects?	1	2	3	4	<u>5</u>

OVERALL

Whether you are satisfied with the Programme	Yes ✓	No	
Whether the lectures able to answer your questions ?	Yes ✓	No	
What is your overall impression about the Training Programme ?	Good ✓	Average	Ok
Do you feel the training will be useful in your classroom teaching	Yes ✓	No	

How do you plan to implement the experience gained here ? Implement my experience with my students.

What suggestions do you have to give for improvement ? I think the teachers from real practical ground (class room) should get chance to share their problems, so that an interaction will develop with other teachers as well as get to know from experts, so that vast ideas can be observed for the smoothness and creativity surrounding of classroom can be developed.

Signature: Sasanka Sekhar Patnaik

ANNEXURE-III

Session Plan

Date	9:30 AM - 11:00 AM	11:00 AM - 11:30 AM	11:30 AM - 1:00 PM	1:00 PM - 2:00 PM	2:00 PM - 3:15 PM	3:30 PM - 5:00 PM
05.02.2025	Inauguration and Interaction with the Participants	TEA BREAK	Dr. Anita Patra (Registrar, CUTM) (Basics of Zoology)	LUNCH BREAK	Prof. Yashaswi Nayak (Insights of Ornamental Fish in Research)	Dr. B. Divya Sri (SoVAS) (Introduction to Veterinary Science)
06.02.2025	Prof. Subasini Patnaik (An Overview of the Immune System)		Dr. Sunita Satapathy (Waste to Wealth)		Campus Tour	Campus Tour
07.02.2025	Dr. Iffat Jahan (Fisheries and Aquaculture)		Dr. Nihal R (Entomology)		Fisheries Lab Visit	Dr. Pradip Kumar Prusty (Role of Cricket as a Feed Supplement in Aqua Industry and Poultry)
08.02.2025	Dr. Bikash Ranjan Sahu (Flow Cytometry: Basics and Applications)		Dr. Aruna Kumar Swain (Physiology and Immunology)		Dr. Surendra Nath Sethy (Cell Cycle and Regulation)	Fisheries Lab Visit (RAS Unit)
09.02.2025	Biotechnology Lab Visit (Animal Cell Culture Lab)		Dr. Ram Prasad Panda (Animal Tissue)		Presentation and Feedback of Participants	Valedictory Function

ANNEXURE-IV

SDG Reports

SDG - Sustainable Development Goals (SDG)

- 1) The environment of central university is very suitable for students as well as researcher.
 - 2) There are number of learning and educational platform are available here.
 - 3) In central university, there are number of department which help full for students to their research.
 - 4) Fisheries & Aquaculture Department is available for their research work and it provide exposure to a labours student.
 - 5) In our project session we remove all the student side perform their study properly & they are most knowlegest with this branch.
 - 6) Supporting stand-ups providing force healthy sustainability.
 - 7) Integrating environmental awareness into the curriculum.
 - 8) Conducting research on waste to-wealth, sustainable aquaculture and sustainable harvest.
 - 9) Supporting eco-friendly enterpreneurship.
 - 10) Promoting environmental responsibility through conservation efforts, sustainable fish farming and waterbld management.
- 11) All are cooperative

Kanaka Sarker Panah
PMT ZWITZY
(M.A. (SIO) Hegder Secondary
School, Govindapally,
Malkajgiri

A Bird eye view on Sustainable Development Goal

Presented by: Manoj K. Saha
Lect. in Zoology
Burdwan U. College, Burdwan
West Bengal, India

On the global landscape of sustainable development goal represents a universal call to action set by the United Nations, comprising 17 interconnected goals aimed at eradicating poverty, protecting the planet and ensuring prosperity for all people by 2030. At a crossroads the issues like climate change, inequality, hunger, health, education and so on more issues with each country expected to contribute based on their capabilities and circumstances acting as a global blueprint for achieving a viable and sustainable future for all.

The aim of SDG in Indian context is to achieve a comprehensive and balanced development by addressing the key issues like poverty, health, education, gender equality, clean water, sanitation, global warming, climate action, economic growth simultaneously keeping focus on environmental protection and social inclusion with the ultimate goal of creating a prosperous India as it is life and lived to achieve by 2030.

The main objective include life reducing poverty, create, improve good health care facilities, quality education, promoting gender equality and protecting the environment. NITI Aayog, the Government of India's think tank, is the nodal institution for achieving SDG in our country. The NITI Aayog has played a leading role in the formulation, implementation and monitoring of the SDG in Bharat.

The SDG and the role of Education Institution put certain course curriculum for the students who are have a great role to build the Nation.

- It is very important to provide better education for a better future.
- Educating the generation for a sustainable life depends on how they are Educating themselves and education provided by the institution.
- It is a new generation and students are more lean on vocational skills development education to make them self-standing.
- The Centurion University such an unique one which has been dedicated to provide and develop a system of education which would highlight the inner skill of the students.
- The generation to come must focus the practicality and practical implication rather the theory based education.

It is high time to have our aim to develop a system of Socio-Eco-economical sustainable development approach in academic and in professional field as well. Everyone do aware on self behaviour and betterment of our community.

Centurion University of Technology & Management, Rajapet (SDGs)

CUTM in Rajapet is dedicated to advancing the United Nations SDGs through a variety of initiatives:-

- (1) **SDG 1:- No Poverty**
CUTM collaborates with local organizations to provide education and skill development to individuals from low income areas, enhancing employability and entrepreneurship opportunities, like farming.
- (2) **SDG 2:- Zero Hunger**
University's agricultural programs focus on sustainable farming practices, aim to improve food security and support local farmers.
- (3) **SDG 3:- Good Health and Well-being**
Through its health care initiatives, include health camp, at campus and in rural.
- (4) **SDG 4:- Quality Education**
CUTM offers inclusive education program, emphasizing skill development & vocational training to enhance learning outcomes.
- (5) **SDG 5:- Gender Equality**
CUTM implements policies promoting equal opportunities and supports women education.
- (6) **SDG 6:- Clean Water and Sanitation**
CUTM engages in water conservation project, including the revitalization of local water bodies to ensure sustainable water management.
- (7) **SDG 7:- Affordable & Clean Energy**
University promotes the use of renewable energy sources and energy efficient practices within its campus. Like solar energy.
- (8) **SDG 8:- Industry, Innovation and Infrastructure**
CUTM fosters innovation through research & development supporting sustainable industrialization and infrastructure development.
- (9) **SDG 14:- Life Below Water**
CUTM conducts program to conserve aquatic ecosystem, ocean, sea and marine resources, ex- Regulate fishing.
- (10) **SDG 15:- Life on Land**
CUTM protects, restores, and promote sustainable use of terrestrial ecosystem, ex- promote sustainable farming.
- (11) **SDG 17:- Partnerships for the Goals**
CUTM actively engages in partnerships with various organizations to achieve sustainable development objectives.

Rajali Sethy, Lect in Zoology
DRI (Autonomous) College, Titilagarh
Dist:- Bolangir Odisha.

Sustainable Development Goal at CUTM, Paralakhemund

Dr. Pradipta Kumar Sarangi

Lecturer in Zoology

Indira Memorial Higher Secondary School
Chendipal, Gajapati. 761017

Sustainability means use of productive resources appropriately as required and remains keep for future generation. This is a sensitive mission of 21st Century in every sphere of life. This is timely executed within university as we feel. From New Education Policy 2020 to Artificial Intelligence each and every class coe teacher makes use very much appreciated the role model of the university fraternity and well aware for sustainable development goal.

From local to local and Laboratory to land the process of transmission of knowledge is wonderful. The association with community participates local dean teacher clusters their up life work, engaging of bright young students in learning and earning use of organic manure by production, vermicompost ready amazing us. Metrology to home and manufacture of 3D printer, brose splitting, Trans to under nature student and vehicle summer are very special. Use of waste as wealth, including advance courses like forensic science, plant breeding, agriculture and developed the project for marketing and earning made me emotional.

Being our stay through outside the campus is comfortable and hospitality of one and all are very cordial.

As a teacher in Gajapati. I have been observing the university since its inception act as a member of South Odisha and as social development organization may be unique to the state. As the resource person invited for the training-workshop and interaction in a certificate. The co-ordinator of the programme was very efficient and aware to our demand. With your all the best to me and all of the initiative for teacher development and a nation.

Sustainable Development Goals (SDGs)

1. Supporting start-ups providing free healthy sustainability.
2. Integrating environmental awareness into the curriculum.
3. Conducting research on waste-to-wealth, sustainable aquaculture and sustainable harvesting.
4. Supporting eco-friendly entrepreneurship.
5. CUTM's education ecosystem extends its impact beyond individual development to raise awareness about environmental issues and sustainable practices.
6. Promoting environmental responsibility through conversion of waste, sustainable fish farming and watershed management.
7. CUTM also emphasizes on 3R, 4R and 5R recycling process of waste to wealth.
8. CUTM impart quality education based on skill development and AI based.

Sudhyan Pradhan Saha
Lect. in Zoology
Science HSS pulmusi
Guzjam.

A REPORT ON CENTURION UNIVERSITY, PARALAKHEMUND CONTRIBUTION TO THE UN'S SDGs. Dt-09.02.2025 05.00PM

As a participant in the five-day training program organized by the C.H.C.E, Odisha, held at CUTM, Paralakhemund I had closely observe the university's contributions to the United Nations sustainable development Goals. This report highlights the key contributions of CUTM towards various SDGs based on close observation and interaction with the training organization.

- ① **No.1. SDG: Poverty**:- The university focuses on providing student with practical skills that enhance employability, especially for economically weaker sections of the locality/society.
- ② **No.2. SDG: Zero Hunger**:- The sustainable agriculture with all modern techniques were noticeable that provide food security to the locality.
- ③ **No.4. SDG: Quality Education**:- The teaching-learning process of the University mainly focuses on experiential learning, modern equipments and digital tools and research-oriented instruction through AR-VR technology.
- ④ **No.9. Industry, Innovation & Infrastructure**:- CUTM has state-of-the-art labs, RAS unit, mushroom production unit, Vermicompost unit and a lot more research hubs promoting innovation in Science & Technology domains.
- ⑤ **No.10. Reduced Inequalities**:- The university promotes inclusive education by providing financial aid in the form of scholarship to students from the marginalized backgrounds.

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