



Centurion
UNIVERSITY

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

EDUCATIONAL PROGRAMMES FOR THE COMMUNITY



TABLE OF CONTENTS

1.	Sustainable Water Management and Fisheries Progress	1
2.	Interaction with Bhavanapadu Fishing Communities	1
3.	Interaction with Bhitarkanika Fisherman Communities	2
4.	CUTM provides insight on Aquaculture	3
4.	Managing Water Pollution with regards to the Laws and Policies	4

1. Sustainable Water Management and Fisheries Progress

Centurion University offers comprehensive water management programmes for the community, focusing on sustainable solutions, innovative technologies, and community engagement to address and resolve water-related challenges. A workshop on Microbial sewage water treatment was conducted on 15th February 2022. Mr. Vijay Kanda conducted the workshop.

- A three-day training programme on ‘Sewage Treatment Plant: Design, Operation & Maintenance’ conducted from 27th- 29th March 2023.
- A National webinar was conducted on ‘Casting into the Future of Fisheries and Aquaculture’, on 22nd and 23rd June 2021, organised by School of Fisheries, Centurion University of Technology and Management, Paralakhemundi, Odisha. The aim of this webinar was to provide current scenarios and trends of fisheries and aquaculture and how to develop it in a sustainable way forward to meet nutritional security.

Centurion University of Technology and Management actively promotes awareness and education on sustainable fishing practices through its School of Fisheries. They engage with local fisherman communities in various ways. Some of the activities are discussed below:

Conducting awareness program for the fisherman communities

The School had conducted a sample survey during the year 2019-20 for a period of three months (January, February and March, 2020) among the fisherman communities with questionnaires related to fishing and aquaculture practices and found that the local fishermen were not really concerned about sustainable harvesting of fish from nature. Taking the survey report into account the School formulated a number of action plans for educating the fisherman on the importance of sustainable use of resources. The students directly met the local fish farmers and apprised them of the best fishing management principles and methods. Some of the case studies have been listed below:

1. Interaction with Bhavanapadu Fishing Communities

Our students organized awareness camps and interacted with the fishermen communities on 5th August, 2019 on the impact of overfishing, unregulated fishing, destructive fishing, blast fishing, bottom trawling and other destructive fishing practices. Furthermore, an interactive session between an expert faculty Dr. Sambid Swain, Associate Dean, School of Fisheries and fishermen was held in which fishermen discussed with the expert to clarify issues regarding preservation, value addition methods and marketing.

2. Interaction with Bhitarkanika Fisherman Communities

Odisha's Bhitarkanika Indian Wildlife Sanctuary is India's second largest mangrove habitat, spread out over a 672 sq. km area. Because of its proximity to the Bay of Bengal, the area's soil is abundant in salts and minerals, and the area has an abundance of tropical and sub-tropical vegetation and fauna. Bhitarkanika Sanctuary is a breeding ground for endangered saltwater crocodiles.

The sanctuary's eastern edge, Gahirmatha Beach, is home to the world's largest Olive Ridley Sea Turtle colony. The National Park, which was formed out of the sanctuary's core region, covers 145 square kilometres and is home to pure biodiversity.

Our students and faculty, during the visit to Bhitarkanika, apprised and shared knowledge with the locals, especially youth and fisherman, about the importance and conservation of mangroves and their biodiversity periodically (once in two months).



2. CUTM provides insight on Aquaculture

1. Aquatic Ecology, Biodiversity and Disaster Management

Objectives

- To impart knowledge on the coastal resources, integrated coastal zone management strategies and disaster management.
- To Study about modes for conservation and preservation of existing ecology and biodiversity.

2. Fishery Oceanography

Objectives

- To educate the students on the oceanographic concepts related to fisheries and impart skill to predict any changes in the ocean.
- Educate the students about the impact of anthropogenic and natural changes in the ocean.

3. Aquatic Mammals, Reptiles and Amphibians

Objective

- To acquaint the students with the theoretical and practical aspects of the aquatic environment and biodiversity.

4. Courses related to Aquaculture

Domain course offered to students

Course title: Domain Track Title: **Intensive Aquaculture**

Web Link: <http://courseware.cutm.ac.in/courses/11961/>

Domain Track Objectives:

1. To enable students to gain practical experience in industry-specific procedures.
2. To provide students with a good understanding of how the various aspects of water quality affect aquaculture.
3. To provide an understanding of managing stock levels in an aquaculture setting.
4. To develop students' experience of collation, presentation and interpretation of data collated during applied study.

Program Title: Bachelor of Fisheries Science

Fisheries science is the academic study of understanding and managing fisheries. It is a multidisciplinary science that draws on the study and investigation of fish processing, aquaculture and fishery resource management, fishing technology and management, fisheries environment, and fisheries extension.

Web Link: <https://cutm.ac.in/programmes/bachelor-of-fishery-science-college-bhubaneswar-odisha/#programme-structure>

3. Managing Water Pollution with regards to the Laws and Policies

Aquatic Pollution

Objectives

1. To impart fundamental and advanced knowledge on different aspects of Aquatic pollution and wastewater management.
2. To encourage means to deal with pollution of the aquatic environment.

Fisheries Policy and Law

Objectives

1. To understand the planning and policy tools and techniques.
2. To be acquainted with various national and international laws for fisheries and aquaculture regulation.

Fish Population dynamics and Stock Assessment

Objectives

1. To understand the application of various models to estimate fish population.
2. To get an idea of the interaction of tropical fish populations in the ecosystem.
3. To emphasis on sustainable use of fisheries resources

These course are taught to the students during their B.F.Sc course work (<https://cutm.ac.in/programmes/bachelor-of-fishery-science-college-bhubaneswar-odisha/#programme-structure>) and they are also encouraged to promote the sustainability principles to the end users during Kishan Mela, field visits and conferences.

The school also fosters farmers training and participation through organizing conferences and workshops, where the sustainable use of natural resource like promotion of zero water culture, Biofloc culture (<http://courseware.cutm.ac.in/wp-content/uploads/2020/06/C18.pdf>),

Organic aquaculture, use of herbal medicines and avoidance of antibiotics are promoted.

