



ITERA

**FTIK**  **C**OSTROP-ID

# THE 2ND COSTROP-ID

**COASTAL AND TROPICAL INFRASTRUCTURE DEVELOPMENT INTERNATIONAL COURSE**

By Faculty of Infrastructure and Regional Technology



# Welcome Note from The Dean of FTIK Itera

To Our Esteemed COSTROP-ID Participants,

On behalf of the Faculty of Infrastructure and Regional Technology at the Sumatera Institute of Technology (Itera), it is my immense pleasure to extend the warmest welcome to our Second International Summer Course!

Last year marked a significant milestone as we successfully launched this initiative, bringing together 33 brilliant minds from 12 diverse nations. The vibrant exchange of ideas, the forging of international friendships, and the collective exploration of complex themes left an indelible mark on our faculty and campus. That success fuels our enthusiasm as we gather once again.

This year, we are thrilled to present a program meticulously designed to be even more engaging, insightful, and deeply rooted in the unique potential of our host region, Lampung. We are committed to offering an unparalleled experience that goes beyond the classroom, we prepare critical topics surrounding infrastructure development and regional planning, not just through theory, but through the lens of Lampung's fascinating potential.

We have crafted activities that actively showcase this potential – expect field visits to key sites, interactions with local stakeholders, and projects that connect academic concepts directly to the Lampung context. This immersive approach aims to spark innovative thinking and provide practical perspectives you can carry forward in your academic and professional journeys.

As Dean, I am incredibly proud that Itera, a young and rapidly rising institution, is fostering this vital international academic dialogue. Your presence here enriches our campus immensely. We encourage you to embrace this opportunity fully: engage in lively discussions, build lasting networks with peers and faculty from around the world, share your unique perspectives, and immerse yourselves in the cultural and environmental richness of Lampung.

We are confident that this Summer Course will be a stimulating, productive, and unforgettable experience for all. We are honored to host you and look forward to a fantastic program filled with learning, discovery, and collaboration.

Welcome to Itera! Welcome to Lampung!

Warm regards,  
Dean, FTIK Itera



Roy Candra P. Sigalingging, M.Sc., Ph. D.

# COSTROP-ID

## *DEVELOPING SUSTAINABLE INFRASTRUCTURE OF COASTAL-TROPICAL AREA*

The "Coastal and Tropical Infrastructure Development International Course" is a comprehensive program designed to equip participants with the knowledge and skills necessary to address the unique challenges of infrastructure development in these vulnerable regions. Through a combination of lectures, case studies, and hands-on exercises, participants will also gain a deep understanding of how spatial approaches can be leveraged to promote sustainability, resilience, and environmental conservation. The fundamental course cover in this program are:

- **Sustainable Infrastructure:** This course address the solution of cases in developing sustainable infrastructure in coastal and tropical areas due to their environmental conditions. Coastal infrastructure discussed will combat erosion, sea level rise, storm surges, while ensure the port efficiency and maintaining coastal access. This involves implementing measures like seawalls, flood barriers, and sustainable drainage systems. Meanwhile, tropical infrastructure must withstand heavy rainfall, manage water scarcity, conserve biodiversity, harness renewable energy, and combat infectious diseases.
- **Spatial resolution:** Participants will emerge with a comprehensive understanding of how spatial resolution can be effectively utilized to address the complex challenges of tropical and coastal infrastructure management. They will be equipped with practical skills and knowledge to leverage high-resolution spatial data for informed decision-making, resilient infrastructure design, and sustainable resource management in these critical regions.
- **Urban and regional issue:** The course will address issues by multifaceted approach that involves collaboration among government agencies, private sector entities, community organizations, and citizens. Additionally, innovative solutions and technologies will be integrated to tackle these challenges and creating more sustainable, livable, and resilient urban and regional environments.



In both coastal-tropical regions and spatial resolution in infrastructure development plays a vital role in enhancing resilience, promoting sustainability, and fostering socio-economic development. By addressing the unique challenges and opportunities presented by these environments, infrastructure projects contribute to building vibrant, inclusive, and resilient communities for generations to come.

# COURSE DETAIL

Date: 14th -24th July 2025 The course is a full-time programme run in an offline format. Courses take place from 9am to 5pm Indonesian Time.

## PARTICIPANTS

Bachelor/Master student (International and Indonesia Students) majoring in science and engineering

## CERTIFICATE OF COMPLETION

Course certificate

## COURSE STRUCTURE

- Lectures and Workshop

lectures and working groups focusing on developing coastal and tropical infrastructure in Sumatera. Topics include sustainable infrastructure, spatial resolution and urban and regional issue. Participants engage in real-world scenarios to apply learned skills. They analyze case studies, conduct scenario planning, and simulate stakeholder meetings. The goal is to equip participants with practical tools for sustainable tourism development in Sumatera.

- Exercise and assignment

Participants engage in exercises and assignments focusing on developing coastal and tropical infrastructure in Sumatera. These tasks include analyzing case studies, conducting field visits, and simulating stakeholder meetings.

- Events

The event includes a gala dinner, exhibition, and farewell party. During the gala dinner, attendees enjoy a formal evening of fine dining and entertainment. The exhibition showcases various aspects of the program, such as achievements, projects, or cultural displays. The farewell party provides an opportunity for attendees to bid farewell in a relaxed and festive atmosphere, celebrating the conclusion of the event.

- Site visit

During the site visit, participants will explore various infrastructure sites such as coast, dams, ports, and edutourism in Sumatra. Additionally, they will visit several tourist attractions in the area. These visits offer practical insights into infrastructure development and management while showcasing the natural and cultural treasures of Sumatera. Participants will have the opportunity to witness firsthand the integration of infrastructure projects with tourism initiatives, promoting sustainable development in the region.

## PRACTITIONERS AND ACADEMICS

1. Dr. Miskar Maini, S.T., M.Eng.
2. Satrio Muhammad Alif, S.T., M.T., Ph.D.
3. Dr. nat. techn. Shahnaz Nabila Fuady, S.T., M.T.
4. Dion Awfa, S.T., M.T., Ph.D.
5. Mustarakh Gelfi, S.T., M.T., Ph.D.
6. Dr. Muhammad Saddam Ali, S.P., M.Si.
7. Dr. Namuri Migotuwio, S.Sn., M.Sn.
8. Rahma Yanda, S.Si., M.Eng., Ph.D.
9. Stirena Rossy Tamariska, S.T., M.Ars
10. Siti Maulidina, M.Eng
11. Surya Tri Esthi Wira Hutama, S.T., M.PWK

## PROGRAM COST

The costs covered by this activity (FREE) are:

- Lodging
- Daily allowance
- Site visit and tourism attraction
- Flight incentive for selected participant\*

\*term and condition applied

## IMPORTANT DATE AND REGISTRATION

Registration held on 11th-30th June 2025 by filling in the following form:

<https://bit.ly/Registration-COSTROPID2025>

## SUPPORT

To guide all who are interested in participating in this event. We can support you by this contact: [ftik@itera.ac.id](mailto:ftik@itera.ac.id) or contact person: +62 822 7975 0099 (Rizki Saleh) [muhhammad.salehekl@itera.ac.id](mailto:muhhammad.salehekl@itera.ac.id)

# TIMETABLE

	DAY-1	DAY-2	DAY-3	DAY-4	DAY-5	DAY-6
	July 14	July 15	July 16	July 17	July 18	July 19
Morning	Opening Ceremony by Dean of FTIK ITERA	<b>Lecture 1</b> Geomatics Engineering: Mapping Tools for Infrastructure Design	<b>Lecture 4</b> Architecture: Workshop Bamboo Mock-Up	<b>Site Visit 1</b> Industrial Visit, Trip to Way Sekampung DAM	<b>Lecture 6</b> Landscape Architecture: Designing Biodiversity Landscapes	<b>Lecture 9</b> Visual Communication Design: Place Branding Workshop- Regional Identity through visual design
	Campus and Faculty Introductory Visit					
Break						
Afternoon	Campus and Faculty Introductory Visit	<b>Lecture 2</b> Urban and Regional Planning: Integrating Green Infrastructure and Community- Based Planning	<b>Lecture 5</b> Civil Engineering: Hydraulic modelling for sustainable infrastructure	<b>Site Visit 2</b> Learn and Conserve: Edu-tourism in Sumatra	<b>Lecture 7</b> Environmental Engineering: From Source to Solution: Sustainable Water Treatment	<b>Lecture 10</b> Integrated Water Management: A Nature- Based Water Solution
		<b>Lecture 3</b> Railway engineering: Workshop and laboratory visit			<b>Lecture 8</b> Ocean Engineering: Nature Based Solutions, Mangrove as Natural Coastal Protection	<b>Lecture 11</b> Tourism: Tourism- Driven sustainable Infrastructure Challenges in Coastal Zones
Evening	Gala Dinner					

Ceremonial Event

Lecture and Workshop

Site-Visit

Event

Exercise

Ceremonial Event

Lecture and Workshop

Site-Visit

Event

Exercise

# TIMETABLE

	DAY-7	DAY-8	DAY-9	DAY-10
	July 21	July 22	July 23	July 24
<b>Morning</b>	<b>Site Visit 3</b> Industrial Visit, trip to Parijang Port, South Lampung	<b>Site Visit 5</b> Learn and Conserve: Edu-tourism in Pahawang Island, Pesawaran	<b>Student Association Engagement</b>	<b>Exhibition and Final Project Presentation</b>
	<b>Break</b>			
<b>Afternoon</b>	<b>Site Visit 4</b> Industrial Visit, trip to PDAM Way Ruli	<b>Site Visit 5</b> Student Association Engagement: Mangrove Planting Action and Coastal Clean Up at Pahawang Island, Pesawaran	<b>Student Association Engagement</b>	<b>Closing Ceremony and Farewell Party</b>
<b>Evening</b>				



## ***The Faculty of Infrastructure and Regional Technology, Institut Teknologi Sumatera***

The Faculty of Infrastructure and Regional Technology (FTIK) at the Sumatra Institute of Technology (Itera) is a higher education entity that focuses on developing science and technology in the fields of infrastructure and regional development. FTIK has a vision to become a center of excellence in the development of science, technology and arts in this field, with a commitment to local wisdom values. Through quality education programs, innovative research and community service, this department aims to produce graduates who have competence in planning, designing, building, managing and maintaining infrastructure as well as sustainable regional development. With support from experienced and committed lecturers, as well as extensive collaboration with related agencies and industry, this department seeks to create a positive impact on the development and welfare of society.

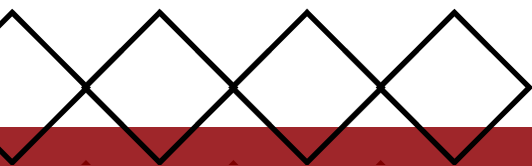
### STUDY PROGRAMS

The Faculty of Infrastructure Technology and Regional Development (FTIK) offers the Regional and City Planning program. It prepares students to analyze, plan, and manage urban and regional development processes, addressing issues related to land use, transportation, housing, and environmental sustainability. Graduates contribute to the creation of resilient and inclusive communities. Our specific study program are:

- Civil Engineering
- Urban and Regional Planning
- Geomatics Engineering
- Architecture
- Environmental Engineering
- Ocean Engineering
- Visual Communication Design
- Landscape Architecture
- Railway Engineering
- Integrated Water Management Engineering
- Tourism



# Our 1st COSTROP-ID





# They said about our programs?

## **IKEGWU CHUKWUDI MICHAEL**

A student from **Nigeria** said,

*"Engaging in group discussions made the learning experience dynamic and insightful."*

## **HIRWA ISHIMWE JEAN BAPTISTE**

A student from **Rwanda** said,

*"Everyone was friendly, and the program ran smoothly with excellent coordination."*

## **THOMAS SHEKU MARAH**

A student from **Sierra Leone** said,

*"The program showed great commitment and was carried out with impressive success."*

# THE 2ND COSTROP-ID

## GET IN TOUCH

FTIK Itera CAMPUS Jl. Terusan Ryacudu, Way  
Huwi, Kec. Jati Agung, Kabupaten Lampung  
Selatan, Lampung 35365.  
<https://ftik.itera.ac.id>