

## About IIT Kharagpur



Kharagpur - a dusty town tucked away in the eastern corner of India, famous until 1950 as home to the longest railway platform in the world - became the nursery where the seed of the IIT system was planted in 1951. IIT Kharagpur started its journey in the old Hijli Detention Camp in Eastern India, where some of the country's great freedom fighters toiled and sacrificed their lives for India's independence. Spurred by the success of IIT Kharagpur, four younger IITs sprouted around the country in the two following decades, and from these five came thousands of IITians, the brand ambassadors of modern India. It was the success of this one institution at Kharagpur that wrote India's technological odyssey.

The Institute takes pride in its relentless effort to provide the best platform for both education as well as research in the areas of science and technology, infrastructure designs, entrepreneurship, law, management, and medical science and technology. IITKGP is not just the place to study technology, it is the place where students are taught to dream about the future of technology and beam across disciplines, making differences enough to change the world.

### Program features/ Structure

Classroom lectures - 70%  
Audio Visuals - 15%  
Interactive Matrix  
Mapping - 15%

### Program Schedule & Venue

1 week, 21-27 September 2020  
IIT Kharagpur, Humanities  
& Social Sciences Seminar  
Room

### Program Fee

Nil for AICTE-QIP  
sponsored participants  
For others- INR 4000  
(Four Thousand + GST @18%)  
per participant

### Who will Benefit (Eligibility)

Faculty members of technical  
institutes, researchers, policy  
circles, environmental consul-  
tants, NGOs and other actors  
involved in the ecological and  
allied domains.

### Last day of registration

**3**  
September 2020

### Accommodation

Accommodation will be  
provided to the AICTE-QIP  
sponsored participants at the  
campus guesthouses. For  
other participants, the same  
will be provided on charge-  
able (affordable) basis as per  
rule.

### How to Apply

Use the link: <https://erp.iitkgp.ac.in/CEP/courses.htm> to apply  
ONLINE.



Payment if applicable is to be done ONLINE after getting short  
listed for the program.

### Contact Us

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# AICTE QIP

QUALITY  
IMPROVEMENT PROGRAMME  
Indian Institute of Technology Kharagpur

Ecology, Resilience  
& Community Wellbeing

21 - 27 September 2020

## Introduction / Overview

We are in the era of the Anthropocene with global environmental change fostering acute regional ramifications. Contemporary worldwide research is aimed at striking a balance between exponential economic growths geared towards accelerating GDP and GNP rates and environmental sustainability reminding us about our infinite requirements within finite planetary scales. Detailed explorations of complex interactions between ecology and society is imperative to identify possibilities through which a directly (and not inversely) proportional correlation between environment and development can be crafted. For huge, diverse and complex contexts like South Asia, environmental protection has to go parallel with (and not against) community livelihoods and wellbeing. Today, resilience studies have moved beyond ecological resilience systems analysis to social resilience. Socio-ecological system (SES) research has exposed us to the embedded social nature variables through which both challenges and opportunities in addressing both environmental and community wellbeing can be addressed. Innovative convergence and cross-fertilization of social and ecological theories are required to deal with coupled environmental and social challenges such as disasters, development interventions and displacement. And, these challenges cannot be understood through the application of either purely technical or social lens, but a combination of both. **Within this context, the course will expose participants to theories, paradigms and methodologies addressing intersections between ecological resilience and community wellbeing. Using numerous field-based real life case studies, it will finally enable participants to design and develop a socio-ecological resilience matrix that can then be applied in specific ecological contexts inhabited by ecosystem-dependent (marginalized) communities.**

## Program Objectives

- Familiarizing participants with the context of the global environmental change and complex interactions between ecological resilience and community wellbeing
- Training participants to various existing paradigms and indices available in this domain along with discussing its challenges and potentials for application across scales
- Exposing students to direct lessons from the field through the dissemination of multi-layered micro-realities across specific ecological contexts
- Enabling participants to develop a socio-ecological resilience matrix for action-oriented research projects

## What will you learn ?

### Program Content

#### A. Concepts, contexts and correlations

- Ecology: emergence and evolution of the concept
- Resilience: definitions, conceptualizations, debates and convergences
- Wellbeing: social, ecological, subjective and relational

#### B. HWB and ecological researches: theoretical frameworks and indices

- HWB frameworks: Gross National Happiness (GNH), Happy Planet Index (HPI), Happiness, Economy and Society (HES), etc.
- Ecological frameworks: SES, Millenium Ecosystem Assessment (MEA), Coupled Human-Natural (CNH) Systems, etc.

#### C. Lessons from the field: Case studies and explorations

- Vulnerability-resilience feedback loops: Fishing communities of Chilika, Orissa
- Ecology-livelihood interface: Chhau dancing communities of Purulia, West Bengal
- Delta, disasters and coping mechanisms: Chorus of the Indian Sundarbans
- Dwindling ecological resources and diminishing happiness: Fishers and farmers of the East Kolkata Wetlands
- Lessons from 'place-making': Citizens accessing lakes of Bengaluru

#### D. Methods and methodologies: towards a socio-ecological resilience template and matrix

- Quantitative
- Qualitative
- Innovative: foraging (painting, photography, other visual communication techniques)
- Design and development of questionnaire, template and matrix
- Brainstorming on potential applied research contexts

## About the faculty

### Dr Jenia Mukherjee

Dr Jenia Mukherjee is an Assistant Professor at the Department of Humanities and Social Sciences, Indian Institute of Technology Kharagpur. Her research interests include environmental social sciences, political ecology and development studies. She has received international awards and fellowships including the World Social Science Fellowship (UNESCO), Australian Leadership Awards Fellowship (DFAT, Australia), Salzburg Global and Nippon Foundation Fellowship (Japan), etc. She has published papers and chapters in peer-reviewed journals and edited volumes, and has engaged in international projects on environment and social communities. She was awarded the prestigious Carson Writing Fellowship (2018-19) by the Rachel Carson Center for Environment and Society, Munich, Germany for completing the book project: *Blue Infrastructures: Natural History, Political Ecology and Urban Development in Kolkata* (Singapore: Springer Nature, 2020).

### Co-Coordinator

#### Dr Anuradha Choudry

Dr Anuradha Choudry is an Assistant Professor at the Department of Humanities and a Member of the Rekhi Centre of Excellence for the Science of Happiness at the Indian Institute of Technology Kharagpur. She has a background in Sanskrit and is working in the areas of Indian/ Yoga Psychology, Indian Philosophy and Culture. A Visiting Faculty for Ghent University, Belgium and other International Institutions, she is regularly invited to teach in several National and International Yoga Schools across the world including the Annual Yoga Congress organised by the European Union of Yoga in Zinal, Switzerland. She has also been the recipient of the Excellent Young Teacher's Award at the Indian Institute of Technology Kharagpur (2019), the prestigious Erasmus Mundus Scholarship of the EU (2007), and a UN related Scholarship on Human Rights (2003). She has published in national and international journals and has co-edited and co-authored books titled *Perspectives on Indian Psychology and Happiness: Indian Perspectives* respectively along with Dr. Vinayachandra B. K.

### Other Resource Persons

Indian Institute of Technology Kharagpur - Prof. Brajesh Dubey (Civil Engineering) | Prof. Abhijit Mukherjee (Geology and Geophysics) | Dr Archana Patnaik (Humanities and Social Sciences) | Dr Amrita Sen (Humanities and Social Sciences) | Prof. Priyadarshi Patnaik (Humanities and Social Sciences, Rekhi Centre of Excellence for the Science of Happiness) | Prof. Pulak Mishra (Humanities and Social Sciences) | Prof. Bhagirath Behera (Humanities and Social Sciences) | Dr Somnath Ghosal (Rural Development) Jayanta Basu, Environmental Journalist, *The Telegraph*; Director, ENGIO