

**One Week
Faculty Development Program
On
“Risk to Resilience – Innovative resilient
strategies for mitigating Climate Change”**

16-21,December 2024 (Online)

(No Charge for Registration, Course and Certification)

Sponsored by



AICTE Training and Learning (ATAL) Academy



Organized By

IPS ACADEMY

INSTITUTE OF ENGINEERING & SCIENCE

(A UGC Autonomous Institute, Affiliated to RGPV)

CIVIL ENGINEERING DEPARTMENT

Knowledge Village, Rajendra Nagar, A.B. Road, Indore (M.P.), 452012

Ph.0731-4014607, E-mail: office.civil@ipsacademy.org,

Visit us: ies.ipsacademy.org

About FDP

The study of climate change holds profound significance in shaping our collective future. By comprehending its mechanisms, impacts, and potential solutions, we gain the power to safeguard ecosystems, economies, and communities. Understanding climate change equips us to make informed policy decisions, drive technological innovations, and foster global cooperation. It empowers us to mitigate environmental degradation, adapt to evolving conditions, and ensure a sustainable planet for generations to come. The interrelationship between sustainable approaches and climate change is deeply intertwined, as sustainable practices play a pivotal role in addressing and mitigating the impacts of climate change. Sustainable approaches, such as renewable energy adoption, efficient resource management, and ecosystem conservation, directly contribute to reducing greenhouse gas emissions and promoting climate resilience. Furthermore, sustainable practices help minimize environmental degradation, which in turn prevents exacerbation of climate-related events like extreme weather patterns and rising sea levels. By adopting sustainable strategies, societies can simultaneously alleviate the drivers of climate change and enhance their capacity to adapt to its consequences. Conversely, addressing climate change through initiatives like transitioning to clean energy sources also reinforces sustainability principles by safeguarding natural resources, promoting equitable development, and fostering economic stability. The synergy between sustainability and climate change action is a powerful force in forging a more harmonious coexistence between humanity and the environment.

From Risk to Resilience embodies a novel paradigm for fostering sustainable development within the nexus of social and ecological systems. Acknowledging the immutable nature of climate change risk, the cornerstone of this transformative approach lies in embracing adaptive principles that drive both resilience and sustainability. By crafting climate change adaptation and resilience strategies grounded in rigorous analysis of historical and projected climate hazards, this paradigm holds the potential to profoundly enhance global societal progress and individual well-being.

Participating in a Faculty Development Program (FDP) focused on Sustainable Approaches for Climate Change Mitigation can yield several positive outcomes for educators, researchers, and institutions like Enhanced Knowledge, Curriculum Enrichment, Research Advancement, Networking and Collaboration, Institutional Impact, Community Engagement as well as Long-Term Impact. In essence, an FDP focused on sustainable approaches for climate change

mitigation can catalyze a ripple effect of positive change, amplifying the impact of educators and institutions in addressing one of the most pressing challenges of our time.

Upon completion of this FDP, participants will possess a comprehensive understanding of climate change mitigation strategies and risk assessment, gaining familiarity with their global application and associated concepts.

This FDP offers a platform for researchers engaged in sustainable strategies for climate change mitigation, encompassing diverse applications. Moreover, it facilitates an avenue for academics, industry professionals, and research scholars to share insights and innovations concerning the realm of sustainable climate change strategies, fostering collaborative exchange.

Thus, the prominent objectives of this faculty development program are as follows

1. Equip participants with a comprehensive understanding of the scientific foundations of climate change and its interconnectedness with sustainable practices.
2. Empower educators to integrate climate change and sustainability concepts seamlessly into diverse academic disciplines, fostering cross-disciplinary awareness.
3. Enable participants to design and implement innovative teaching methodologies that instill a sense of environmental stewardship and climate action in students.
4. Strengthening GIS applications to assess the impacts of climate change and promote environmental sustainability.
5. Foster collaborative research initiatives among faculty members to explore novel solutions for climate change mitigation and adaptation, encouraging interdisciplinary engagement.
6. Develop a network of informed and motivated educators who actively contribute to policy discussions, community outreach, and advocacy efforts related to sustainable approaches for climate change.

About ATAL Academy

AICTE Training and Learning (ATAL) Academy is established with the vision “To empower faculty to achieve goals of Higher Education such as access, equity and quality”. ATAL academy sponsors and conducts a series of faculty development programs in thrust areas identified by AICTE.

About the Institute

IPS Academy, Institute of Engineering & Science A UGC Autonomous Institute, Affiliated to RGPV is one of the leading private self-financing institutes devoted to imparting quality engineering education with the sole motto of “Knowledge, Skill & Values”. The institute was established in 1999 and Ranked 42 among the Top Engineering Colleges in country and 32 amongst the Private Engineering Colleges in country by Times of India and is top preferred institute for education amongst self-financing institute in MP by CSR .

We offer 14-UG & 8-PG programs out of which UG Programs are accredited by NBA New Delhi

About the Department

The oldest and most elegant branch of engineering profession is Civil Engineering due to the fact that is related to almost all aspects of civilization. The Department was established in 2004. Now Department has M.Tech.in Structural Engineering and Construction & Planning Management. The Department is equipped with more than 15 laboratories and computer center for Research & Development, Teaching, Training & Consultancy. Two Labs are supported by MODROBS. Weather Station installed by department to monitor temperature, humidity, soil moisture, wind velocity, rainfall etc. Eight Patents are granted, Five Patents are published, Seven Books Published by the Department. Five Limka book records registered by the Students. UG Program is accredited by NBA New Delhi.

The Civil Engineering Department with its multifaceted faculty continues to maintain and cultivate its strong links with the infrastructural industry and academic and research institutions both within and outside the country.



Course Contents

- Sustainability and Climate Change
- Climate Change Impacts and Implications
- Contaminants of Emerging Concern (CECs)
- Contaminant Transport and Fate
- Climate Change Mitigation
- Environmental and Health Impact Assessment
- GIS application for Climate Change Impact Assessment
- Sustainable Environmental Management
- Sustainability Assessment
- Air Quality & Climate Change



Chief Patron

Ar. Achal K. Choudhary
President, IPS Academy, Indore

Patron

Dr. A. G. Kothari
Advisor, IPS Academy
Institute of Engg.& Sc.

Dr. Archana Keerti Chowdhary
Principal, IPS Academy
Institute of Engg.& Sc.

Advisory Committee

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Ms. Aditi Patidar
Ms. Tanushree Sinha

Registration: <https://atalacademy.aicte-india.org/signup>



- No Registration Fee
- ATAL Portal Registration is Mandatory
- NOC from Employer is required to be uploaded in the AICTE-ATAL Portal
- Last Date for registration: 10.12.2024

Coordinator

Dr. Devaanshi Jagwani
Professor
Email: devaanshijagwani@ipsacademy.org
Mobile: +91 9630195894/ 8109386721

Co- Coordinator

Ms. Swati Shrivastava
Assistant Professor
Email: swatishrivastava@ipsacademy.org
Mobile: +91 9179607722

***Identified potential Resource Persons with Expertise and Experience from Academia, Industry**

S. No.	Name & Affiliation	Topic	Photograph
1	Dr. Manoj Kumar Mani Chaturvedi CEO at Global Sustainability Solutions and Services QFZ LLC, Doha Qatar	Climate change and Sustainability	
2	Dr. Ravindra Kumar Gautam Raja Jwala Prasad Postdoctoral Fellow-Institution of Eminence, BHU Varanasi, India	Environmental Pollution Assessment & Climate Change	
3	Dr. Nitin Goyal Principal Scientist and Chair, CSIR-NEERI (National Environmental Engineering Research Institute), 89B, Dr Annie Besant Road, Worli, Mumbai	Climate Change Mitigation	
4	Dr. B.S. Giri Assistant Professor - Senior Scale Sustainability Cluster School of Engineering, University of Petroleum and Energy Studies, Dehradun	Sustainability Assessment	
5	Mr. Amit Anand Principal Consultant, Climate Resilience and Disaster Risk Reduction, Pricewaterhouse Coopers Pvt. Ltd, NOIDA	GIS Applications for Climate Change Impact Assessment	
6	Dr. Ajay Vikram Ahirwar Associate Professor, Civil Engineering Department, National Institute of Technology, Raipur	Environmental and Health Impact Assessment	
7	Dr. Ajanta Goswami Associate Professor, Department of Earth Science, IIT Roorkee	Remote Sensing for Climate Change Assessment	

8	<p>Dr. Gaurav Chauhan Assistant Prof at K.S.K.V Kachchh Univeristy, Bhuj, Former Sr. Geologist at Institute of Seismological Research Gandhinagar</p>	<p>Seismology & Climate Change</p>	
9	<p>Dr. Sonam Paliya Alexander von Humboldt Fellow, RWTH Aachen University, Germany</p>	<p>Contaminants of emerging concern (CECs) and sustainable remediation strategies</p>	
10	<p>Dr. Ashootosh Mandpe Assistant Professor, IIT Indore</p>	<p>Air Quality & Climate Change</p>	
11	<p>Dr. Subramaniam A/L Karuppanan Environmental Management and Research Association of Malaysia (ENSEARCH) and specializes in areas such as Environmental Impact Assessment (EIA) and Environmental Management Plans (EMP)</p>	<p>Environmental Health Impact Assessment and Sustainable Environmental Management</p>	
12	<p>Mr. Saurabh Sakhre Sr. Scientist, Environmental Technology Division, CSIR- National Institute for Interdisciplinary Science and Technology (NIIST) Thiruvananthapuram, Kerala, India</p>	<p>Micro-Climatic Study Using Remote Sensing & QGIS</p>	
13	<p>Mr. Kundan Burnwal Senior Advisor & Deputy Lead of Project GIZ (Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH, A-2/18 Safdarjung Enclave, New Delhi, India</p>	<p>Climate Change Impacts & Implications</p>	