



19th September, 2023

Shri Mr. Prudhvi Tej Immadi
Joint Managing Director (HR & Admin)
Andhra Pradesh Transmission Corporation Limited, Andhra Pradesh-520004

Subject: eMasters Degree Program in "Power Sector Regulation, Economics and Management" (PSREM)

Dear Shri. Immadi,

IIT Kanpur announces admission to the 3rd cohort of the **eMasters Degree Program in "Power Sector Regulation, Economics and Management" (online mode)** for the cohort beginning January 2024. Approved by Senate, Indian Institute of Technology Kanpur, the program is **suitable for the working professionals across the power sector covering generation, transmission, distribution, regulatory commissions, government officials, trading, market, consumers, renewable energy, consulting etc.**

The faculty of the program includes noted national and international academicians as well as leading practitioners drawn from the sector. The program has gained attention amongst the personnel who would like to upgrade their knowledge in real life context and contribute to their parent organisation. Previous two cohorts include officials from the respective sector stakeholders covering public as well as private sector.

The program is designed for the working professionals with **minimum 2 years of work experience**. It is fully online and can be completed in a duration of 1-3 years. The program includes **12 online modules including two modules for supervised Regulatory Capstone Projects**. Each module has **graded online exams** with award of grades as per academic framework at IIT Kanpur. Further details about the program including eligibility are provided in the enclosed brochure.

We invite your organization to be part of this journey by **nominating/sponsoring your officials to the program**. We are delighted to inform you that **partial fee waiver up to 3 modules** may be granted to the eligible students nominated/sponsored by eligible entities including **PSUs, Government, Regulatory Commissions, Statutory Bodies, Defence, MSME and other Corporates**.

IIT Kanpur is pleased to contribute to your organisation's efforts for upskilling of your officials/employees. We suggest that the program be included as a part of the skill upgradation/ HRD calendar of your organisation. **I am confident that the program would add significant value to your organisation as it navigates the dynamic regulatory and policy landscape in the Indian power/ energy sector.** We encourage you to sponsor candidates for the program. Please also share this information with your officials for further dissemination.

A brochure for the eMasters program is attached herewith. For further details and link to apply, please visit

<https://emasters.iitk.ac.in/course/masters-in-power-sector>

For any further information and clarification, you can reach me: 99355 49369, anoops@iitk.ac.in.

Thanking you.

Yours sincerely,

Anoop Singh

Program Coordinator and Faculty – eMasters on PSREM

Professor, Department of Management Sciences

Founder & Coordinator, Centre for Energy Regulation (CER) & Energy Analytics Lab (EAL)

Indian Institute of Technology Kanpur

Kanpur – 208016 (India)

WebSites: cer.iitk.ac.in, eal.iitk.ac.in

**Scan to download
eMasters Brochure**





Department of Management Sciences (DoMS)

Indian Institute of Technology Kanpur
Kanpur - 208016

eMasters Degree in “Power Sector Regulation, Economics and Management”

Department of Management Sciences (DoMS) has made several successful strides towards policy/ regulatory research, teaching, advisory and consultancy in the diverse areas of power/ energy sector. The eMasters Degree program in “Power Sector Regulation, Economics and Management” is a multi-disciplinary program approved by the Senate, IIT Kanpur. It provides **conceptual and applied understanding of the policy and regulatory framework of the sector from power system, economic, financial, regulatory and legal perspectives.**

Target Group

The program, delivered in online mode is designed for working professionals with a **minimum experience of 2 years**. The average experience of the last two cohorts - 9 years across varied background including engineering, regulation, finance, accounting, economics, law and public policy. The program is suited for **officials/ employees of Regulatory Commissions, Government, Generation Companies (thermal, hydro and RE), Licensees (Transmission, Distribution and Trading), System Operators, Open Access Consumers, Equipment Manufacturers, Banks & Financial Institutions, Insurance & Investment Funds, Consultants, Academicians and other energy sector stakeholders including Green Hydrogen, Storage, EV, Coal, Oil & Gas etc.**

Admission Criteria and Partial Fee Waiver

Further details about minimum qualification, admission criteria, application process, timelines and fee structure are available at <https://emasters.iitk.ac.in/course/masters-in-power-sector>

A **partial fee waiver upto 3 modules** may be granted, at the sole discretion of the institute, to candidates nominated/ sponsored by eligible entities including **PSUs, Government, Regulatory Commissions, Statutory bodies, Defence, MSME and other Corporates**. See link above for more information.

Pedagogy and Program Delivery (Online Mode)

- The program content is delivered through **recorded, live and live interactive sessions through online mode**. The live/ interactive sessions and online exams are scheduled over the weekend.
- More than 20-24 hours of content per module is spread over 8-9 weeks. The modules also include hands on exercises/ case studies/ assignments, as appropriate, to enable better understanding of concepts in applied contexts.
- **Online resources** are identified and, **selected ebooks** are provided by IIT Kanpur to the students.
- All students are encouraged to visit IIT Kanpur campus for an **immersive campus experience and interaction**.
- Institutional visit (voluntary) - Discom, Power System Operator and/ or Power Exchange during summer break.

Curriculum and Module Structure

The program, building on foundations of economics, accounting and finance, provides an in-depth understanding of the policy and regulatory aspects for generation (thermal, hydro and RE), transmission, distribution, trading, power system operation, power procurement, power market, smart grid, electricity tariff etc. Apart from faculty from relevant departments of IIT Kanpur, the sessions are contributed by **leading national and international experts. Modules can be completed in a duration of 1 to 3 years.**

Quarter 1	Quarter 2	Quarter 3	Quarter 4
MBA 951: Fundamentals of Economics, Accounting and Finance	MBA 954: Power Sector Regulation in Practice: MYT Framework for Generation, Transmission & Distribution	MBA 957: Power Procurement: Principles and Practice	MBA 960: Regulatory Capstone Project-II
MBA 952: Power Sector Reform and Regulation: Economic Principles and Evolution	MBA 955: Competition and Power Market Development	MBA 958: Renewable Energy: Policy, Regulation and Market	MBA 961: Designing Retail Electricity Tariff
MBA 953: Power System Operation and Ancillary Services	MBA 956: Smart Grid Technologies and Implementation	MBA 959: Regulatory Capstone Project-I	MBA 962: Power Sector Regulation: Legal aspects, Emerging Issues and International Perspectives

Supervised Regulatory Capstone Projects help the students to apply the concepts learned and devise solutions for real-life challenges. Multiple interactive sessions with the supervisor(s) are scheduled to guide students to achieve objectives of the projects, which include frontline and emerging topics of relevance.

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this brochure



Scan to access
eMasters webpage



Program Faculty and Experts

- Faculty members of IIT Kanpur from Department of Management Sciences, Electrical Engineering, Economics and Sustainable Energy Engineering.
- Leading industry experts, and noted academicians at national and international level.
- A list of faculty and experts associated with the program is available at <https://emasters.iitk.ac.in/course/masters-in-power-sector>

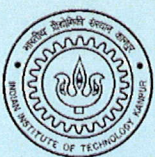
Key Topics (A Snapshot)

- Indian Power Sector – Structure and Reforms
- Electricity Act, 2003 and Amendments
- National Electricity Policy and Tariff Policy
- Electricity Rules and Amendments
- Key CERC and SERC Regulations
- Learning from Judgements of APTEL and Supreme Court
- Distribution Sector Reforms
- Understanding Perfect Competition and Monopoly
- Theories & Economics of Regulation
- Pricing and Regulation of Natural Monopoly
- Fundamentals of Accounting and Finance
- Concepts of Project Financing
- Power System Operation
- Indian Electricity Grid Code
- Deviation Settlement Mechanism
- Ancillary Services
- Congestion Management
- Demand Response and Demand Side Management
- Security Constrained Economic Dispatch (SCED)
- Market Based Economic Dispatch (MBED)
- Tariff Determination for Generation, Transmission, Distribution and Renewable Energy
- Multi-year Tariff Framework
- Regulated Tariff Determination for Thermal and Hydro
- Transmission Pricing & Sharing of Transmission charges
- Regulated Tariff Determination for Distribution
- Estimating Cost of Service
- Retail Tariff Design
- Learnings from International Experiences in Power Sector
- RE Policy and Regulation
- Feed-in Tariff, RPO, HPO and ESO
- Regulated Tariff determination of RE projects
- Competitive Bidding for RE Based Projects
- Market for RECs and ESCerts
- Rooftop Solar: Gross and Net Metering
- Energy Storage
- Solarisation of Agriculture
- Market for Carbon Credit
- RE Market: GDAM, RE-RTC, Hybrid RE
- Green Hydrogen: Technology, Economics, Regulatory and Policy Aspects
- Competition and Power Market Development
- Open Access and Green Open Access
- Power Exchange Products and Market Operations
- Retail Competition
- Cross Border Trading
- Power Market Derivatives
- Demand Forecasting and Power Procurement Planning
- Planning for Resource Adequacy
- Competitive Bidding for Conventional Projects
- Smart Grid: Regulation and Implementation
- Smart Metering
- Consumer Complaints, Redressal and Ombudsman
- Charging Infrastructure for Electrical Vehicles (EVs)

Program Governance and Award of Degree

- The program is conducted under the aegis of the Office of Digital Learning as per the approved rules and guidelines.
- The eMasters programs have their own academic governing structure like other academic programs of IIT Kanpur. **Course grading policies are similar to other academic programs.**
- Candidates, having successfully completed all the academic requirements, would be awarded the eMaster degree by the IIT Kanpur at its convocation. Graduated students get **IIT Kanpur Alumni status.**

Follow all updates and further information about the program through following links



Department of Management Sciences, Indian Institute of Technology Kanpur - 208016

<https://www.iitk.ac.in/doms/>

Program Coordinator: Prof. Anoop Singh

<https://www.iitk.ac.in/ime/anoops/>



Office of Digital Learning, IIT Kanpur, Indian Institute of Technology Kanpur - 208016

<https://emasters.iitk.ac.in/course/masters-in-power-sector>



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