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## WHAT IS THE COURSE ABOUT?

The MPSRR is an executive education short course designed to equip participants with a robust understanding of power sector reforms and regulation, with a special focus on Africa. It covers global and African trends in power market development, principles of electricity market design, and the economic regulation of the power sector. Key objectives include understanding how to design and operate new power markets, set effective tariffs, attract investment, integrate renewable energy, and improve utility performance and energy access across the continent. By the end of the course, participants gain practical insights and frameworks to manage the energy transition in African power systems.

#### WHO SHOULD ATTEND

**Policymakers and Government Officials**: Energy ministry staff, regulators, and advisors involved in shaping energy policy or regulatory frameworks.

**Utility and Regulatory Executives:** Board members, CEOs, senior managers from electric utilities and regulatory agencies who oversee power sector performance and reforms.

**Investors and Industry Professionals:** Professionals from the private power sector, financial institutions, and investment firms interested in power projects, independent power producers (IPPs), and market opportunities.

**Energy Sector Consultants and Advisors**: Analysts, consultants, and researchers working on power sector projects, reforms, or capacity-building in Africa.

In general, the course is suited for anyone in the power/ energy sector seeking to deepen their knowledge of market reforms, regulatory practices, and the unique challenges of the African power landscape.

(Watch a short course introduction video here: https://youtu. be/0SXnlv6JUJs)

# WHAT ARE THE TOPICS COVERED IN THIS COURSE?

**Power Market Reforms:** Evolution of power markets from state-run monopolies to competitive models, including lessons from global reform experiences and how they apply to Africa.

**Economic Regulation & Tariff Design:** Fundamentals of regulating utilities (why and how), tariff-setting methodologies (cost-reflective tariffs, cross-subsidies for the poor), and ensuring utilities' financial sustainability while protecting consumers.

**Investment and Market Development**: Strategies for attracting investment in generation and transmission, structuring IPP projects and renewable energy auctions, and financing mechanisms to drive sector growth.

**Renewable Energy Integration:** Managing the influx of variable renewable energy sources (solar, wind) into the grid, including grid balancing, ancillary services, and planning for high renewable penetration.

**Utility Performance & Energy Access:** Improving utility operational and financial performance (reducing losses, improving governance) and expanding electricity access through grid extension, off-grid solutions, and mini-grids.

**Grid Management & Future Systems:** Technical regulation of the power system (quality of supply, reliability standards) and emerging trends like distributed energy resources (DERs), wheeling arrangements, and "power systems of the future" in the context of African infrastructure.

## WHAT MAKES THIS COURSE UNIQUE AND RELEVANT TO AFRICA?

• Focus on African Challenges: The curriculum is tailored to address Africa's specific power sector challenges – such as low electrification rates, utility financial constraints, and integration of renewables – rather than applying one-sizefits-all solutions. Discussions and case studies center on real issues faced by African countries.

# MANAGING INFRASTRUCTURE INVESTMENT, REFORM AND REGULATION IN AFRICA



**Expert Faculty and Practitioners**: The course is led by a mix of renowned international experts and experienced African practitioners. For example, the anchor lecturer (Dr. Martin Rodriguez Pardina) and the course convenor (Dr. Peter Twesigye) is a prominent African regulatory expert. Participants learn from faculty who have hands-on experience across Africa, Latin America, and other regions.

**Interactive Learning with Case Studies:** The program emphasizes practical application through African and international case studies, group exercises, and discussions. Participants analyze examples like South Africa's power market evolution, regulatory decisions impacting utilities (e.g., Eskom/NERSA case), and mini-grid projects, gaining insights that are directly relevant to their home contexts.

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- Peer Networking: As a flagship course in Africa, it attracts a diverse group of participants from across the continent and beyond. Attendees benefit from sharing experiences with peers – policymakers, regulators, utility managers, and investors – building a professional network focused on improving African power sectors.
- Local Context, Global Best Practices: MPSRR is hosted at UCT's Graduate School of Business (Power Futures Lab) in partnership with African regulatory associations, ensuring content is grounded in African realities while benchmarking against global best practices. This combination keeps the course highly relevant and immediately applicable to Africa's regulatory and market reform efforts.

## HOW FREQUENTLY IS THIS COURSE OFFERED?

The MPSRR course is a flagship annual program. It is typically offered once a year, with the latest iteration usually scheduled in the last quarter of the year. (For example, the 2024 course ran from late October to early November.) Prospective participants should check the Power Futures Lab website for announcements of upcoming dates. Because it is offered annually, early application is encouraged to secure a spot, as the course often attracts high demand from professionals across Africa.

### **TOPICS COVERED**

The sessions on power sector challenges and reforms are interconnected and build upon each other to provide a comprehensive understanding of the sector's complexities. The journey begins with Session 1: African Power Sector Challenges & Trends, which highlights the pressing issues facing Africa, such as energy access and infrastructure challenges. This sets the stage for **Session 2:** Global History of Power Market Reforms, which provides historical context on how power markets have evolved globally. Session 3: Rethinking Power Sector Reforms - Implications for Africa then applies these global lessons to Africa's unique challenges. The focus shifts to practical applications in Session 4: Power Market Design and Operation (Global Comparisons) and Session 5: Developing South Africa's Power Market - Case Study, offering insights into the unfolding wholesale power market reform models. The importance of regulation is emphasized in Sessions 6-8, which cover the rationale, objectives, and methodologies of regulation. Tariff setting aspects are explored in Sessions 9-11, focusing on rate of return regulation, cost of capital, and tariff design. The integration of new technologies is addressed in Sessions 12-15, covering transmission access, distributed energy resources, and financial modeling while Session 16 delves into integrated resource planning. The final sessions, 17-21, focus on renewable energy auctions, financing for renewables, quality of electricity supply, and off-grid solutions, providing a comprehensive roadmap for Africa's energy future.

## HOW CAN I APPLY FOR THE COURSE?

Interested participants can apply via our website www.gsb.uct.ac.za/powerfutureslab Email | pflcourses.gsb@uct.ac.za Telephone | +27 21 650 7568

### **Delivery Method**

Precourse Week (online ALL ) | 20-24 October 2025 Online | 27-31 October 2025 | R15 950 Face-to-Face | 27-31 October 2025 | R29 950

Location UCT Graduate School of Business, Cape Town