



Master of Management in the field of Energy Leadership



This programme provides a **solid foundation** in all aspects of energy leadership in order to make more confident, decisive and effective **leaders** in this sector



WITS BUSINESS SCHOOL

South African case studies produced by our Case Centre

350



Faculty with PhDs

95%



Academic articles by our faculty published every year (+/-)

30



WITS UNIVERSITY

28

A-rated Scientists



4

Nobel Laureates



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MESSAGE FROM THE ACADEMIC DIRECTOR

The lack of energy access in Africa is not due to a lack of natural resources, but one that I attribute to a dearth in leadership. Africa; with her young and growing population, vast untapped energy and other natural resources, has the potential to become a leading global economic force. This potential can be realised only if we develop the next generation of leaders in the energy sector; develop the scarce skills needed to grow economies, leaders who can deal with growing uncertainty in an inter-connected, fast-changing technological world, a world in an accelerating transition to producing cleaner energy, and a world engulfed by a global health pandemic and political uncertainty.

It is against this background that Wits Business School (WBS) took the initiative to establish an African Energy Leadership Centre (AELC). For anyone wanting to carve out a career for themselves in this crucially important sector, we encourage you to find out more about our programmes. This continent urgently needs a new generation of visionary, solutions-oriented leaders in the energy field.

We hope to play an important role in developing such leaders and look forward to welcoming you to WBS.

Prof Logan Rangasamy
Academic Director

WHAT IS THE AFRICAN ENERGY LEADERSHIP CENTRE?

Wits Business School launched the African Energy Leadership Centre (AELC) in 2017, the first of its kind in Africa. The AELC aims to address the issues of energy shortages in Africa as well as the skills deficit in an industry which is of vital importance to economic growth on the continent. A hub of teaching and research, the focus of the AELC is on the latest thinking and best practice in energy leadership.

The three main areas of the African Energy Leadership Centre are:

1. Postgraduate and executive education
2. Research and thought leadership
3. Networking and professional development

The AELC offers a specialised Master's degree and a Postgraduate Diploma in the field of Energy Leadership. Both programmes will provide you with a solid foundation in all aspects of energy leadership in order to make you a more confident, decisive and effective leader in this sector.

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PROGRAMME BASICS

Duration: 18 to 24 months

Level: NQF 9

Study mode: Block Release

PROGRAMME STRUCTURE AND OPTIONS

The programme comprises two parts: nine core courses and one elective course (50%) and a research report (50%). Teaching is provided on a block release basis to accommodate the needs of busy working professionals (five blocks of nine days on campus plus home study or online if circumstances require).

The programme is expected to be completed between one year and 18 months (or a maximum of 24 months), including completion of the research report.

CORE COURSES

latest thinking

best practice

1. Energy Leadership Programme Orientation

The very nature of a Master of Management qualification is that it relies on group interaction between candidates. The African Energy Leadership Programme Orientation course is designed to help candidates acclimatise to this approach to teaching. It provides vital information applicable to all courses and presents a sample of syndicate work which is designed to assist in accelerating successful small group performance.

2. Energy Value Chains

This foundation course provides an introduction to energy demand and supply. It traces energy demand back to the extraction of primary energy, examining the transformations that occur along the primary energy value chains. Concepts and units used in measuring the changes in energy content and value add at each link in a value chain are used, including Energy Return on Energy Invested and Energy Storage on Energy Invested. Candidates will utilise these concepts in evaluating energy mixes and interactions between energy carrier value chains.

3. Energy Geography, Geopolitics and Macroeconomics

This course examines and evaluates energy supply and demand from a global perspective. It reviews the historical development of energy resource endowments and international trade as influenced by strategic, geopolitical, economic and environmental concerns and ambitions. In doing so the role of energy in modern economies and disparities in access to energy are considered, as well as the role played by international energy organisations.

4. Strategic Management of Energy Innovation

This course equips candidates with strategic management knowledge and skills to address new and emerging technologies for extracting, transporting, transforming and delivering energy services to customers and the resultant disruptive impacts on existing energy systems and firms. It relates this to servicing basic energy needs and changing consumer preferences.

5. Energy and Environmental Sustainability

This course interrogates decision-making trade-offs between various energy carriers and environmental sustainability within the context of climate change, international market interventions driven by environmental concerns and changing consumer preferences. Candidates engage with a broad range of topics, including sources of energy emissions, emissions trading and adaption to climate change.

CORE COURSES

continued

6. Energy Finance, Business Strategy and Investment

This course is concerned with the relationship between business strategy, finance and investment in the context of energy project financing structures – together with risks and enabling contracts accompanying those financial strategies both within and outside of regulated markets. Candidates garner knowledge regarding current financial models as well as explore innovative and creative new finance and investment schemes. Candidates will prepare and complete an energy project investment proposal in developing their financial modelling skills.

7. Ethics and Corporate Governance

Ethics and corporate governance have become key risks in business. Large scale energy investments expose firms to a correspondingly large scale of financial risk. This course seeks to equip candidates with a knowledge base of sound corporate ethics and corporate governance including systems of management and procurement targeted at corporate alignment. It includes risk management, operational efficiency, governance, ethics, and the key responsibilities and accountabilities of boards, of individual directors, and of management.

8. Energy Policy and Regulatory Dispensations

Energy markets are subject to greater levels of government intervention than most. This course provides a broad conceptualisation of the basis for economic regulation and equips candidates to work within the parameters of policy and regulation. Themes include access to energy infrastructure markets and regulatory dispensations for energy infrastructure, including regulatory dispensations appropriate for a transition from a natural monopoly to competitive markets.

9. Leadership Quest

This course is designed to be an intellectually demanding one which requires candidates to apply a structured approach to understanding their own behaviour and then to formulate plans to improve their own leadership performance. The objective of the Leadership Quest is to help candidates become the best leaders that they are capable of being.

10. Research Methodology (Duly Performed)

This core course introduces candidates to rigorous research methods and techniques and provides opportunities for applying these tools in the development of a research proposal. It includes skills development in research-related techniques and training in relevant software packages.

ELECTIVE COURSES

Choose one of the following six courses:

1. ENERGY ENTREPRENEURSHIP AND ENTERPRISE DEVELOPMENT IN AFRICA

This course is designed to provide a rigorous introduction to the theoretical and practical issues associated with energy entrepreneurship and developing energy enterprises specifically in Africa (excluding North Africa). It will provide candidates with an in-depth understanding and valuable insights into Africa's competitiveness in the global energy economy and the relationship between various factors and institutions that influence the economic development and competitiveness of countries, regions and firms.

2. SYSTEMS THINKING AND COMPLEXITY

This course provides candidates with a rigorous overview of systems thinking within energy markets that requires candidates to see and make connections between solutions, systems and society. It provides candidates with a holistic approach to the identification and solving of problems, where parts and components of a system, their interactions and interrelationships are analysed individually to see how they influence the functioning of the whole system.

3. DECARBONISING ENERGY

The global economy has commenced a transition to lower carbon intensive energy. This course provides candidates with an in-depth understanding of this complex process focusing on the primary methods used to reduce carbon emissions. It is designed to equip candidates to make strategic decisions in the transition to a lower carbon intensive energy future in the least disruptive manner possible.

4. ENERGY MARKET STRUCTURES

This course provides candidates with an in-depth understanding of the factors influencing the design of energy markets arising from regulatory influences and technological innovation. It examines the physical, technological and financial constraints that can determine outcomes and is designed to explore ways in which the structure of energy markets could evolve and the business opportunities that may arise.

5. ENERGY IN FUTURE CITIES

This course provides candidates with an in-depth understanding of the interactions between urban morphology and energy infrastructure design and how these intersect with current and emerging energy technologies which determine the extent and options available in the transition to smarter cities. Technological disruptions to the transport of people and freight and the changing nature of work and places of work are inextricably intertwined, all of which have energy system implications. Candidates will model options using interactive models and planning tools.

6. STRATEGIC TALENT MANAGEMENT IN ENERGY ENVIRONMENTS

This course explores, first, the core components of the energy talent management value chain, underpinning processes and key role players and how to win in the on-going War for Talent. Second, the specific case of managing digital talent when operating in global and dynamic markets will be covered. Third, the course will provide participants with some insights into managing their own energy careers effectively. The objective is to expose candidates to current local and international best practices in the field of energy talent management and to provide them with an actionable approach that can enhance digital talent management in their organisations.

RESEARCH REPORT (50%)

This is not a taught course, but the independent study portion of the curriculum. A prerequisite for the course is attendance at the Research Methodology course. Candidates must undertake academic – usually empirical – research and produce a mini-thesis.

APPLICATION PROCESS

- Only online applications are accepted. Please go to www.wbs.ac.za and click on the apply now button and follow the links.
- Please ensure that all information is correct and that you have uploaded everything on the checklist.
- Should your application be successful, an amount of R15 000 will be payable on acceptance. This amount is non-refundable and will be off-set against the registration fee payable in your first year.

**Deadline for applications:
check website for update**

REQUIREMENTS FOR ADMISSION

- First degree and postgraduate (NQF 8) studies (preferably an Honours degree but a good Bachelor's degree with a recognised and accredited postgraduate degree or diploma is also recognised). In certain cases, recognition of prior learning may be granted.
- Mathematics and English – a level of above-average competence.
- Three to five years' appropriate work experience. If the applicant seeks exemption from this requirement a letter of motivation must accompany the application.

Candidates may also be required to attend an interview with WBS.
- Candidates short-listed may be required to complete admissions tests at their own cost.

MM-EL FEES

Fees for the Master of Management in the field of Energy Leadership for 2024 are quoted as **R180 830***

* subject to review in January 2025

ENQUIRIES

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WBS reserves the right to change its schedule as required.

Please note: WBS processes applications for admissions on a continuous basis in the order of receipt thereof.

Checklist

- Online application form
- Faculty of Management Part III form
- Copies of all degree certificates
- Academic transcripts in English
- SAQA Evaluation certificate (for international students)
- Your CV including places of work to substantiate work experience
- Letter of motivation in support of application
- Non-refundable fee of R200



Spending time in this learning environment, surrounded by exceptional people, will provide you with the foundation for an extraordinary life

WHAT IS THE WBS CASE CENTRE?

In line with the world's leading business schools, WBS has its own Case Centre which produces a collection of fascinating, contextually-relevant and up-to-date case studies every year. The case method, pioneered by Harvard Business School, is widely recognised as *the* most powerful learning tool for management students. WBS's case studies tell the stories of some of the continent's most famous (and infamous) business leaders and organisations, giving our students the unique opportunity of playing the decision-maker role in a real-life business dilemma.

TEACHING EXCELLENCE

Apart from our full-time faculty, we have a number of visiting/adjunct professors from other business schools around the world. Numerous guest lecturers bring their up-to-the-minute business or industry knowledge into the classroom.

PUBLIC DIALOGUE, DEBATE & DISCUSSION

WBS hosts regular public seminars and panel discussions on energy issues facing South Africa and the rest of the continent.

There is no better time or place for you to become all that you want to be

experience



I went into the MM-EL with limited knowledge of the energy field and my expectations were exceeded. I derived huge value from the programme, including being able to decipher government's energy policies and regulations and to be able to understand the jargon used in the sector. The exposure to class content and invited guest lecturers showcased the many possibilities of employment and entrepreneurial aspects of the energy sector, and I feel fully prepared to embark on a new career.

Gcobisa Melamane

UNIVERSITY OF THE
WITWATERSRAND,
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WBS Wits
Business
School
Sculpting global leaders

MM-EL

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