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COURSE BROCHURE

Mini Master of Business Administration in Electrical Systems Engineering

4 – 8 October 2027
Dar es Salaam

Mini Master of Business Administration in Electrical Systems Engineering

Ref: 3198_121603 **Date:** 4 – 8 October 2027 **Location:** Dar es Salaam **Fees:** 7900 GBP

The Mini Master of Business Administration in Electrical Systems Engineering is a 1-week training course for electrical engineers and technical leads stepping into management, who each build an electrical asset investment case for a real generation, network or plant decision. Grid expansion, ageing equipment and tight capital mean engineers who speak finance shape better choices. Jupiter Prime Training runs this Mini Master of Business Administration in Electrical Systems Engineering as a bridge to the boardroom.

Why Mini Master of Business Administration in Electrical Systems Engineering Matters Now

Three forces push electrical decisions into business territory. The energy transition is adding renewable plant, storage and new loads, changing where networks must grow. Much transmission and distribution equipment is reaching the end of its design life at the same moment, so replacement budgets compete with expansion. Owners, lenders and customers also expect evidence that each investment earns its keep. An organisation that weighs these well spends capital where it lowers risk most; one that treats them as purely technical matters overspends, delays connections or runs fragile assets for too long.

Who Gains Most from Mini Master of Business Administration in Electrical Systems Engineering

- Engineers justifying substation, line or plant upgrades
- Leads holding maintenance budgets for transformers and switchgear
- Project engineers overseeing electrical construction contractors
- Plant engineers accountable for industrial supply reliability
- Planners proposing network reinforcement and connections

An asset management or network planning group gains most when several members attend together.

Mini Master of Business Administration in Electrical Systems Engineering Capabilities

Participants turn single-line diagrams and condition reports into business arguments.

- Calculate net present value and levelised cost for competing electrical options — capital approval committees
- Weigh repair, refurbishment and replacement of ageing equipment — maintenance budget holders
- Assess asset criticality and failure consequence across a fleet — risk owners
- Specify contract terms that place construction and supply risk sensibly — procurement teams
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Communicate technical choices as business recommendations — executives and boards
- Build an electrical asset investment case from evidence — investment sponsors

Key Mini Master of Business Administration in Electrical Systems Engineering Terms

- Regulated asset base — The value of network assets on which a regulated utility is allowed to earn a return.
- Levelised cost of energy — The lifetime cost of a generating or storage asset divided by the energy it delivers.
- Net present value — The sum of future cash flows from a project, discounted to today, minus its initial cost.
- Asset criticality — A ranking of how badly an equipment failure would affect supply, safety and revenue.
- Whole-life cost — The total cost of owning equipment, including purchase, installation, maintenance, losses and disposal.
- Earned value — A measure comparing work completed against planned cost and schedule.

Mini Master of Business Administration in Electrical Systems Engineering Day by Day

Day 1: The Business of Electricity Networks

- Electricity Value Chain Economics — Where Generation, Grid and Load Earn Revenue
- Regulated and Competitive Asset Models — How Tariffs Shape Investment Choices
- Stakeholder Mapping for Utilities — Balancing Customers, Owners and System Operators
- Strategic Position of an Electrical Business — Choosing Where to Compete
- Energy Transition Pressures — Renewables, Storage and Electrification Effects on Portfolios

Day 2: Finance for Electrical Assets

- Reading Utility Financial Statements — Linking Asset Base to Earnings
- Capital and Operating Expenditure Trade-Offs — Repair, Refurbish or Replace
- Net Present Value and Internal Rate of Return — Ranking Network Projects
- Levelised Cost of Energy — Comparing Generation and Storage Options
- Sensitivity and Scenario Testing — Exposure to Load Growth and Fuel Prices

Day 3: Risk, Contracts and Asset Decisions

- Asset Health and Criticality Indexing — Prioritising Transformers, Cables and Switchgear
- Risk-Based Maintenance Budgeting — Cost of Failure Against Intervention Cost
- Engineering, Procurement and Construction Contracts — Allocating Scope and Risk
- Power Purchase and Connection Agreements — Revenue Certainty for New Capacity
- Supplier Evaluation and Whole-Life Tendering — Selecting Equipment on Lifetime Cost

Day 4: Leading Electrical Projects and People

- Project Portfolio Selection — Sequencing Substation, Line and Plant Upgrades
- Earned Value Tracking — Spotting Cost and Schedule Drift Early
- Outage Planning Economics — Coordinating Shutdowns With Commercial Impact
- Leading Multidisciplinary Engineering Crews — Delegation and Performance Conversations
- Safety Culture as a Business Asset — Linking Incidents to Cost and Reputation

Day 5: Practising the Electrical Asset Investment Case

- Option Framing From Day One Strategy — Defining the Investment Question
- Financial Model Assembly — Applying Present Value and Cost of Energy Tests
- Risk and Contract Overlay — Testing the Case Against Failure and Supplier Exposure
- Board Communication for Engineers — Presenting Technical Options in Business Terms
- Electrical Asset Investment Case — Completing and Defending the Final Recommendation

Applying Mini Master of Business Administration in Electrical Systems Engineering After the Course

- Run a whole-life cost comparison on one pending transformer replacement.
- Lead a criticality ranking for one substation to reorder maintenance spend.

Mini Master of Business Administration in Electrical Systems Engineering Questions FAQ

What is the Mini Master of Business Administration in Electrical Systems Engineering and why does it matter now?

It joins finance, strategy, contracts and leadership with electrical engineering. It matters because transition investment and ageing equipment force engineers to justify choices in business terms.

Which roles gain most from the Mini Master of Business Administration in Electrical Systems Engineering?

Electrical engineers and technical leads moving into management gain most, especially those preparing budgets, overseeing contractors or proposing upgrades.

How does the Mini Master of Business Administration in Electrical Systems Engineering differ from a general management course?

It applies investment appraisal, risk and contract thinking directly to transformers, lines, generation and industrial supplies, rather than to examples from many industries.

What do you bring back from the Mini Master of Business Administration in Electrical Systems Engineering?

You bring back an electrical asset investment case built on a real decision, with the financial and risk reasoning to defend it.

Mini Master of Business Administration in Electrical Systems Engineering: The Way Forward

The electrical asset investment case each participant completes first informs a single pending decision, such as replacing a transformer fleet or adding storage at a plant. Budget holders and capital committees use it to compare options on value and risk. After its first use, revisit the risk and contract assumptions, as condition data and supplier markets shift.