

# **Power System Asset Management**

14 - 18 March 2022

CENTRE FOR RENEWABLE & SUSTAINABLE ENERGY STUDIES

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Stellenbosch university iyunivesithi universiteit





german cooperation DEUTSCHE EUXAMMENARBEIT

To be confirmed	
Certificate of attendance (5 CPD points)	REGISTER H
Certificate of competence (5 CPD points)	<b>REGISTER H</b>
15 academic credits at NQF 8 or 9 level	READ MOR

DEADLINE

DATE

VENUE

ACCREDITATION

Certificate course registration closes 14 calendar days before the course starts. The number of attendees is limited. Bookings will be taken on a first come, first served basis. For academic module registration deadlines, please contact the relevant academic programme coordinator.

### PRESENTER

**Prof Johann Wannenburg** is currently with the Asset Integrity Institute of the University of Pretoria and holds the Chair for Asset Management in the Eskom Power Plant Engineering Institute, where he is pursuing innovative methods to uplift the technical skills levels in Eskom. He has many years of industry experience in structural mechanics and decision-making working on large mining and other projects like the South African Large Telescope.



#### **Synopsis**

Strategic (planning) and tactical (operational) approaches to asset management principles and practices applied to a power system with increasing renewables.

#### Strategic Power System Asset Management

- Introduction to Asset Life Cycle Management
- Early Equipment Management
- Maintenance and Utilisation
- Disposal
- Risk and Integrity Management

#### **Tactical Power System Asset Management**

- Asset Management Framework
- Criticality
- Maintenance Tactics
- Work Management
- Defect Elimination
- Asset Performance Management
- Maintenance Facilities and Tools
- Quality Management
- Materials and Contractor Management

The above content will be developed specifically for Power Systems with significant renewables capacity, with emphasis on Asset Management of renewable power systems and the influence of renewable capacity on nuclear and coal power systems (e.g. two-shifting).

## **Qualification and accreditation**

The module is accredited for a variety of outcomes, depending on what the attendee registers for. Module contact time (40 hours) are shared by all attendees, but additional assessments, assignments, and projects will be specific to the outcome that the attendee registered for.

- The module is accredited for ECSA Continuous Professional Development (CPD) credits, and attendees can obtain a certificate of attendance (if all lectures have been attended) or competence (if all lectures have been attended and various assessments have been successfully passed).
- The module is also accredited for 15 academic credits at both NQF8 level (Post-graduate diploma) and NQF9 level (Masters), as part of various <u>academic programmes</u>. This requires a total time investment of 150 hours.

### **Delivery Model**

- The module will be delivered over five days. Pre- and post-module assignments and projects are applicable depending on the outcome the attendee registered for.
- A blended classroom/online model will be followed, with students being offered the options to attend in person (covid dependent), online only, or a mixture of these.

# Who should attend

Engineers, technologists and technicians active in the energy sector. Government and local authority officials. Architects, planners and developers. Investors. Academic students.

## **Travel and Accommodation**

All travel and accommodation arrangements are the attendee's own responsibility.

## Prerequisites

Certificate of attendance: none

**Certificate of competence / Post-graduate diploma at NQF8:** NQF7 engineering qualification

Masters at NQF9: NQF8 engineering qualification IT infrastructure: For online attendees, adequate internet connectivity to connect reliably via Teams for the duration of the module. For Certificate of competence, Diploma and Masters attendees, a computer capable of running Windows 10 with user rights to install new software.

#### **Module Fees**

- The standard fee for the five-day module is:
- R12 000 for a certificate of attendance, and
- **R14 000 for a certificate of competence**. Please refer to the University's latest study cost information for academic fees.
- Attendees from Eskom, municipalities, government, academia and industry that are actively involved in some aspect of the South African power system may apply for a 50% CPD fee reduction.
- Cancellations made up to 21 days before the module starts will be subject to a 15% handling fee. No refunds will be made after this date; however, substitutions will be accepted.
- Payment is mandatory for attendance.
- In the case of unforeseen circumstances, Stellenbosch University reserves the right to cancel the module or change the presenter/s, in which case all fees will be reimbursed in full on request.

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