WE ARE HIRING

Faculty of Engineering and the Built Environment

Department: Mechanical, Industrial and Electrical Engineering

Associate Professor: Manufacturing Engineering

Requirements

A relevant Doctorate (NQF Level 10) with at least seven (7) years of tertiary education level and/or industry experience or an equivalent combination of relevant professional experience in Mechanical Engineering. Specialised knowledge and experience in specific field of Manufacturing Engineering. Excellent English communication skills (oral and written). Proven competence in successful sourcing of research or project funding from third-party sources, successful initiation and management of research projects, curriculum development, and strong management/organisational and mentorship skills. Competence to develop high-quality course materials and teach at least three (3) of the following courses at both under- and post-graduate levels: Design Principles, Manufacturing Processes, Computer Aided Manufacturing, Production Systems Engineering, Production Cost Analysis and Control, Production Management, Cleaner Production and Energy Efficiency in Manufacturing Systems. Competence to assume academic leadership, to establish professional networks, and to maintain links with industry, as well as experience in developing post-graduate programmes. Sound research profile including ten (10) peer-reviewed journal articles/books/conference proceedings and successful supervision of at least three (3) Master's (research) students.

Associate Professor: Renewable Energy Requirements

A relevant Doctorate (NQF Level 10) with at least seven (7) years of lecturing experience at tertiary education level and/or industry experience or an equivalent combination of relevant professional experience. Excellent English communication skills (oral and written). Proven competence in successful sourcing of research or project funding from third-party sources; successful initiation and management of research projects, curriculum development and strong management/organisational and mentorship skills. Competence to develop high-quality course materials and teach in at least three (3) of the following courses at both under-graduate and post-graduate levels: Thermodynamics, Fluid Mechanics, Thermofluids, Heat Transfer, Computational Fluid Dynamics, Power Plant Technology and Renewable Energy Systems. Competence to assume academic leadership, to establish professional networks and to maintain links with industry; Sound research profile including ten (10) peer-reviewed journals/books/conference proceedings and successful supervision of at least three (3) Master's (research) students.

Laboratory Technician: Mechanical Engineering Requirements

A Bachelor's degree (NQF Level 7) in Mechanical Engineering with at least three (3) years experience in industry. Competence to teach the following: Workshop Practice; Engineering Drawing; Engineering Graphics. Ability to prepare, set-up laboratory experiments, and to guide the students accordingly, during laboratory/practical sessions.

Lecturer: Mechanical Engineering

students (research) under-graduate level.

work-related duties as assigned by the supervisor.

Workshop Technician: Mechanical Engineering Workshop

A Master's degree (NQF Level 9) in Mechanical Engineering or a related qualification with

at least four (4) years of lecturing experience at tertiary education level and/or industry

experience or an equivalent combination of relevant professional experience. Excellent English

communication (oral and writing). Competence to teach at least five (5) of the following

Mechanical Engineering core courses: Thermodynamics; Principles of Design; Maintenance

Engineering; Fluid Mechanics; Process Planning and Cost Estimation; Thermofluids; Mechanics

of Materials; Fluid Mechanics. Competence to establish professional networks and to maintain

links with the industry, as well as experience in developing under-graduate programmes.

A credible record of peer-reviewed publications, community engagement, supervision of

A Bachelor's degree (NQF Level 7) in Mechanical Engineering with at least three (3) years

experience in industry/workshop. Excellent English communication skills (oral and written). Knowledge and solid understanding of handling and maintaining mechanical equipment.

Competence to teach the following courses: Workshop Practice, Engineering Drawing and

Engineering Graphics. Ability to give practical training on the following machines: Conventional Lathe Machine; Milling Machine; CNC Lathe; Welding; Bench Fitting. Competence in the use of

Maintain the Mechanical Workshop and its equipment; control and manage the inventory;

prepare practical classes and provide support to students during practical sessions; evaluate

the students' performance during practical sessions; organise excursions; monitor the Work

Integrated Learning programme associated with the workshop; invigilate during practical

sessions/examinations and assist with the marking. Responsible for the Service, repairs and

maintenance of machines and equipment in the Mechanical Workshop. Perform any other

Requirements

Requirements

workshop equipment.

Key Responsibilities

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Maintain the laboratories and equipment therein, control and manage the inventory in the laboratory of responsibility; prepare practical/laboratory classes and provide support to students during practical/laboratory sessions, e.g., marking their laboratory reports; organise excursions; assist the Laboratory manager to monitor the Work Integrated Learning programme; invigilate during practical sessions/examinations.

