(NQF 10) SAQA: 96969

EB13.12.1 Purpose of the qualification

The purpose of the qualification is to develop an engineering educator with advanced abilities in designing and applying appropriate research methodologies to engineering education related problems. One of the main objectives in this process is to develop an advanced capability to conduct engineering education research of an original nature. It also promotes a lifelong learning approach and an aptitude for training other students in similar fields.

EB13.12.2 Qualification outcomes

The qualified student will be able to:

Upon completion of this programme, a student should be able to:

- 1. Analyse and solve engineering education research/development problems of an original nature creatively and innovatively by applying relevant methodologies and methods to the chosen topic of research.
- 2. Plan and manage research projects, demonstrating fundamental knowledge, understanding and insight into the principles, methodologies and concepts that constitute academically responsible engineering education research practices.
- 3. Plan and conduct advanced investigations, research and/or experiments of an original nature by applying or developing appropriate theories and methodologies and perform appropriate data analysis and interpretation.
- 4. Communicate effectively, both orally and in writing, with specific research institutions, audiences and the community at large, in so far as they are affected by the research, using appropriate structure, style and graphical support.
- 5. Apply and assess appropriate advanced engineering education research methods, skills, tools and information technology effectively and critically in engineering education research/development practice and show an understanding and a willingness to accept responsibility for the impact of research/development activities on society.
- 6. Perform synthesis of components, systems, works, products or processes as a set of related systems and assess their social, legal, health, safety and environmental impact and benefits, where applicable, in the chosen field of inter-disciplinary research.
- Employ various learning and research strategies and skills to master outcomes required for preparing him/herself to engage in continuous learning and research, to keep abreast of knowledge and skills required in the engineering education research/development field.

- 8. Participate as a responsible citizen in the life of local, national and global communities by acting professionally and ethically in the chosen field of research.
- 9. Demonstrate ethical and cultural sensitivity and awareness across a range of engineering education contexts in the execution of engineering education research/development activities.

EB13.12.3 Admission requirements and selection criteria

An approved master's degree in Quality / Operations

CODE	MODULE
P60M110	THESIS: OPERATIONS MANAGEMENT (RESEARCH: 2)
P60M110	THESIS: OPERATIONS MANAGEMENT (RESEARCH: 2)

RESEARCH TIME: 100%