MODULE DESCRIPTIONS

ELECTROMECHANIC TECHNOLOGY I

This module provides the fundamental underpinning of basic electrical and mechanical engineering knowledge and phenomenon. Electromechanics focuses on the interaction of electrical and mechanical systems as a whole and how the two systems interact with each other.

ENGINEERING MATHEMATICS I

This module introduces and strengthens fundamental mathematics knowledge to support basic science and discipline-specific engineering science modules in the curriculum and provide a foundation for further studies.

ENGINEERING PHYSICS I

This module teaches students the fundamental underpinning concepts and principles related to the mechanics, electricity, and magnetism necessary to support basic discipline specific engineering-science modules.

ENGINEERING PROFESSIONAL SKILLS

This module provides the fundamental skills to harness the power of ICT to support engineering in various disciplines. The module aims to develop students who will use these skills consistently, fairly, and effectively while considering the framework of the South African engineering environment.

MECHANOTECHNOLOGY

This module will provide students with the understanding and analysis of control systems, electrical machines, and the integration thereof within a mechatronic engineering environment, as well as Mechanical engineering knowledge underpinning mechatronics.

MECHATRONIC DESIGN PROJECT

This module will provide the fundamental underpinning knowledge to wire, configure, test and integrate a mechatronic system application and will introduce fundamental discipline specific engineering knowledge to support basic science modules in underpinning the mechatronics project.

MECHATRONIC SYSTEMS

This module will provide the fundamental skills and introduce fundamental discipline specific engineering knowledge to support basic science modules underpinning Mechatronics.

SMART MANUFACTURING

This module will provide the student with the fundamental knowledge of modern Smart processes applied to engineering manufacturing