

MENGSC MECHANICAL ENGINEERING (MANUFACTURING, PROCESS AND AUTOMATION SYSTEMS)

Programme Learning Outcomes

Programme Learning Outcomes for MEngSc in Mechanical Engineering (Manufacturing, Process and Automation Systems) (NFQ Level 9, Major Award)

On successful completion of this programme, students should be able to:

- Demonstrate a thorough understanding of the principles and theoretical bases of modern manufacturing techniques, automation, and production processes;
- Identify appropriate manufacturing systems for different production requirements, and describe their performance using appropriate analytical and modelling methods;
- Apply appropriate technology, quality tools and manufacturing methodology to design, re-design and continuously improve the manufacturing operations of engineering companies;
- Plan, research, execute and oversee experiments and research projects, critically analyse and interpret data, and effectively disseminate the results;
- Work effectively as a member of a multidisciplinary team, be self-motivated and able to work independently, and demonstrate leadership;
- Communicate effectively, via appropriate presentation techniques and technical publications, to other engineers, professionals, and society at large;
- Demonstrate an understanding of the role of the mechanical engineer in society and their responsibility for ethical, environmental and safety issues;
- Produce a dissertation in mechanical engineering and disseminate the results of their research via appropriate presentation techniques.