	National University of Sciences and Technology
	Course Description

Course Title	Course Code	Credit Hours
Rehabilitation Engineering	BMES-845	3 – 0

TEXT BOOK:

- Rehabilitation Sciences Applied to Mobility and Manipulation, Cooper RA.: 1995, Institute of Physics.
- Intelligent Systems and Technology in Rehabilitation Engineering, Teodorescu H-NL & Jain LC.: 2001, The CRC International Series on Computational Intelligence, (latest edition).
- An Introduction to Rehabilitation Engineering, R.A. Cooper, JH. Ohnanbe, D.A. Hobson: 2006, 9. Taylor & Francis (latest edition).

REFERENCE BOOK

- N/a

COURSE OBJECTIVES:

This course is an introduction to a field of engineering dedicated to improving the lives of people with disabilities. Rehabilitation engineering is the application of engineering analysis and design expertise to overcome disabilities and improve quality of life. A range of disabilities and assistive technologies will be investigated. Describe in detail various types of physical and sensory disabilities of a temporary and permanent nature and be familiar with the devices and technology used to diagnose and improve such disabilities.

COURSE OUTLINES

- Clinical Rehabilitation Science & Engineering: Principles, Terminology & Models
- Sensorimotor Systems and Human Performance Assessment
- Rehab Biomechanics of Devices and Interfaces
- Rehab Upper/Lower Limb Amputations Devices and Interfaces
- Neurorehabilitation: Innovation in Therapeutic Strategies

ASSESSMENTS

Description	Percentage Weightage (%)
Assignments	05-10%
Quizzes	10-15%
Mid Semester Exams	30-40%
End Semester Exam	40-50%