

Equipment and Maintenance Management

Module Code:	MHT5004-B
Academic Year:	2018-19
Credit Rating:	20
School:	Department of Biomedical and Electronics Engineering
Subject Area:	Medical and Healthcare Technology
FHEQ Level:	FHEQ Level 5
Module Leader:	Dr Peter Twigg

Additional Tutors:

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Lectures	36
Tutorials	12
Directed Study	150
Examinations DO NOT USE	2

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Academic Year (Sept - May)

Module Aims

Evaluate the fundamental principles of maintenance management, the various maintenance strategies and the associated requirements and benefits.

Outline Syllabus

Quality systems
Record keeping
Pre-purchase

Acceptance and safety testing
 Planned preventative maintenance and repair
 Calibration/quality assurance
 Reliability, repeatability, validity, limitations
 Decontamination
 Decommissioning and disposal
 Radiological protection issues
 Special waste, clinical waste, radioactive waste, WEEE
 Incident investigation/reports through evaluation of factual evidence

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 Describe each stage of the equipment management life-cycle and how this is implemented within healthcare. Understand quality systems and their place in the delivery of modern healthcare
 Explain principles supporting the selection of a medical device that will ensure it is fit for purpose including the ability to develop and evaluate basic specifications to meet user and service requirements
 Understand engineering principles and methodology as applied to maintenance, calibration and quality assurance of a wide range of commonly used equipment within healthcare
- 2 Demonstrate good infection control awareness
 Operate within legislation guidance, policies and procedures
- 3 Use and develop analytical skills
 Demonstrate attention to detail
 Demonstrate logical thought processes
 Demonstrate problem solving
 Use clear written communication
 Communicate complex ideas in simple terms

Learning, Teaching and Assessment Strategy

Concepts, theories and principles explored in formal lectures supported by seminars, tutorials and directed reading. Discipline skills developed in open-ended problem solving, tackled by working in small groups supported by members of academic staff. Oral feedback is given during seminars. The assessment will examine the wider learning outcomes expressed in the descriptor.

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Examination - closed book	2 Hour Examination (SEM 2)	2 hours	70%	Yes

Summative	Coursework	Coursework (Sem 1)	2000-words	30%	No
-----------	------------	--------------------	------------	-----	----

Legacy Code (if applicable)

ENG2103L

Reading List

To view Reading List, please go to [rebus:list](#).