

1 Module Details	
Module Name	Clinical Engineering Work Environment
Nominal duration	It is expected that students with the appropriate entry knowledge and skills will successfully complete this module in 18 to 20 hours.
Module code	NUE922
Discipline code	0703230
2 Module purpose	This module provides students with an understanding of the work environment of a clinical engineering technician in a hospital or the service division of a medical equipment company.
3 Prerequisites	nil
4 Relationship to competency standards	This module provides some of the knowledge and skills underpinning competency in the following standards: National Electrotechnology Industry Standards, Units NES304, NES406, NES504 and the relevant specialisation. Metals & Engineering Industry Standards, Units 18.56A, 18.57A, 18.58A, 18.65A, 18.66A.
5 Content	<ol style="list-style-type: none"> 1. The biomedical workshop and customer service <ul style="list-style-type: none"> • Relationship and communication between technician and patients and medical staff • Medical environment • Duty of care and due diligence • Work record • Australian Standards 2. Financial management <ul style="list-style-type: none"> • Financial viability <ul style="list-style-type: none"> - Labour costs - Plant and utility cost - Capital equipment - Materials and consumables cost - overheads • Interdepartmental competition for job tenders • Outsourcing 3. Basics of purchasing <ul style="list-style-type: none"> • Budgets • Delegation and authority to spend • Purchasing • Tender process 4. Legal aspects affecting operations <ul style="list-style-type: none"> • OH&S legislation and its implications • Quality and industry standards • Duty of care/due diligence • Sickness, injury and workers compensation • Indemnity insurance • Accreditation

<p>6 Assessment strategy</p> <p>Assessment methods</p> <p>Conditions of assessment</p>	<p>Assessment should be progressive reflecting a holistic approach to ensure the module purpose is met. To assist in ensuring validity, reliability and fairness assessment instruments should include practical exercises, assignments and written tests consisting of a number of item types, such as multiple choice, short answer and problem solving.</p> <p>Normally learning and assessment will take place in a classroom/laboratory.</p>
<p>7 Learning Outcome Details</p> <p>Learning Outcome 1</p> <p>Assessment criteria</p>	<p>Describe the important aspects of client service in a clinical engineering environment.</p> <p>1.2 Describe the relationship of the technician to the patient and medical staff.</p> <p>1.3 Explain the meaning of the terms duty of care and due diligence.</p> <p>1.4 Outline how duty of care and due diligence are implemented and how evidence is kept that due diligence etc. has been implemented.</p> <p>1.5 Explain the significance if industry equipment and quality standards to the accreditation of the workshop, due diligence, duty of care and the successful completion of the job.</p>
<p>Learning Outcome 2</p> <p>Assessment criteria</p>	<p>Describe the important aspects of financial management for a clinical engineering department.</p> <p>2.1 List the factors that comprise the cost of labour, including penalties, award rates and increments.</p> <p>2.2 List the factors that comprise the cost of plant and utilities.</p> <p>2.3 List the factors that affect capital equipment acquisition.</p> <p>2.4 Outline typical purchase procedures for a Government department.</p> <p>2.5 Give examples of areas where cost containment measures may be effective in the provision of service.</p> <p>2.6 Describe the basic characteristics of a budget.</p>
<p>Learning Outcome 3</p> <p>Assessment criteria</p>	<p>Summarise selected legal aspects of a biomedical engineering workshop operation.</p> <p>3.1 Name the legal instruments which cover the provision of specified aspects of service and client care.</p>

	<p>3.2 List the main OH&S regulations relevant to the working environment of the technician in the biomedical engineering sector.</p> <p>3.3 Describe hypothetical situations where compliance may be problematic and propose actions which can remedy the problems.</p> <p>3.4 State the cost of continued non-compliance with legal requirements covering the industry.</p>
8 Delivery of the module	
Delivery strategy	<p>Delivery strategies must be suitable for learning both theoretical and practical aspects described in the module purpose. It is considered that the most effective way to achieve this is by the integration of theory and practice where students learn by experimentation and through research and laboratory reports. It is recommended that learning and assessment be facilitated in a holistic manner, which may require a learning outcome sequence other than that indicated in the module.</p>
Resource requirements	
Occupational health and safety requirements	<p>A safe and healthy environment will be provided for students and teachers as well as safety procedures followed with regard to teaching/learning activities.</p>