



Module Code: EJ115022S	Version: 1 Date amended: June 2008
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1. Module Title: *maximum 100 characters*

Basic Maths for Technology

2a. Module Leader:	2b. Department:	2c. Faculty:
S Cirstea	Design and Technology	Science and Technology

3a. Level: <i>see guidance notes</i>	3b. Module Type: <i>see guidance notes</i>
1	standard

4a. Credits: <i>see guidance notes</i>	4b. Study Hours: <i>see guidance notes</i>
15	150

5. Restrictions

Pre-requisites:	none
Co-requisites:	none
Exclusions:	none
Pathways to which this module is restricted:	none

LEARNING, TEACHING AND ASSESSMENT INFORMATION (for inclusion in the Module Guide)

6a. Module Description: *200 – 300 words*

This module is essential for the student who needs a background in basic mathematical techniques and analysis in order to pursue a degree programme in technology, physical, life or social sciences, economics and business studies. In the majority of cases, the student will not have studied mathematics beyond GCSE level or equivalent, or, in the case of mature students, may not have studied mathematics for a considerable time. These backgrounds will be taken into account in the delivery style of the module.

The module will help students to assess their existing mathematical skills and sympathetically enable them to remedy any basic deficiencies. It will then develop the core mathematical skills needed for successful study at degree level in science, technology and business studies, and also provide a basis for those students wishing to undertake further mathematical study in the “Mathematics for Technology” modules.

In most cases, students who have previously studied mathematics to AS level or equivalent, or beyond, and who wish to pursue further mathematical study will be directed to higher level modules rather than take this module.

The module will be assessed by two in-class tests.

6b. Outline Content:

- Revision of basic arithmetical and algebraic skills
- Indices and logarithms; calculator skills
- Graphical skills
- Geometry, trigonometry, complex numbers, basic Boolean algebra
- Basic statistics

6c. Key Texts/Literature:

Croft A. & Davison R. Foundation Maths., Pearson, 4th ed., 2006, ISBN: 0 131 979215 3

6d. Specialist Learning Resources:

7. Learning Outcomes (threshold standards)	
	On successful completion of this module the student will be expected to be able to:
Knowledge and understanding	1.Understand the basic techniques of elementary mathematics. 2.Know how to express and manipulate relationships in mathematical form.
Intellectual, practical, affective and transferable skills	3.Solve scientific problems using basic algebraic and graphical methods. 4.Apply mathematical methods to a wide variety of practical situations.

8. Learning Activities			
Learning Activities	Hours	Learning Outcomes	Additional Comments (including details of use of web-CT)
Teacher managed learning:	36	1,2,4	Lectures, workshops & examples classes
Student managed learning:	114	2,3,4	
TOTAL	150		

9. Assessment		
Assessment Method	% contribution to module mark or P/F	Learning Outcomes
In-class test Week 5	40	1,2,3
In-class test Week 11	60	1,2,3,4
<p>In order to pass this module, students are required to achieve an overall mark of 40% In addition, students are required to (a) for each element of fine graded assessment listed above, achieve a minimum mark of 30% (or higher - see Module Guide) and (b) pass any pass/fail elements</p>		

OTHER TECHNICAL DETAILS

10. Delivery of the Module <i>Please delete as appropriate</i>					
Delivery	This module is delivered over...	Yes or No?	Indicate which by deleting as appropriate		
1	...a single semester	Y	Semester 1	Semester 2	
2	...two semesters	N	Semester 1	Semester 2	
3	...a single trimester	N	Trimester 1	Trimester 2	Trimester 3
4	...two trimesters	N	Trimester 1	Trimester 2	Trimester 3
5	...three trimesters	N	Trimester 1	Trimester 2	Trimester 3
6	...multiple delivery patterns	N			
7	... an exceptional delivery pattern	N	Give details (see guidance notes)		

11. Learning Activities – further details	
Learning Activities	Details of duration and frequency of learning activities
Teacher managed learning:	3 hours of lectures, workshops and examples classes per week
Student managed learning:	9.5hrs weekly

12. Module Assessment – further details				
Method	Length/duration	Fine graded (FG) or pass/fail (PF)	Minimum Qualifying Mark <i>see guidance notes</i>	Comments
In-class test	1 hour	FG	30%	
In-class test	1.5 hour	FG	30%	

13. Subject: <i>see guidance notes</i>	
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