

Course Code:	BRM100	
Course Name:	Essential Mathematics	
Trimester:	Trimester 2, 2019	
Programs:	Engineering and Science	
Credit Points:	Non credited course	
Course Coordinator:	Maria Aneiros	
Document modified:	19 June 2019	

# Teaching Team

Your lecturer/tutor can be contacted via the email system on the portal.

Name	Email
Maria Aneiros	maria.aneiros@staff.griffithcollege.edu.au
Brock Grant	brock.grant@staff.griffithcollege.edu.au
Nima Talebian	nima.talebian@staff.griffithcollege.edu.au
Seyed (Hamid) Nejad	sene@portal.griffithcollege.edu.au
Shahrzad Saremi	shahrzad.saremi@staff.griffithcollege.edu.au

# Staff Consultation

Your lecturer/tutor is available each week for consultation outside of normal class times. Times that your lecturer/tutor will be available for consultation will be given in the first week of lectures. A list of times and rooms will be published on the Griffith College Portal under the "myTimetable" link.

# Prerequisites

There are no prerequisites for this course. However, this course is a prerequisite for some of your Diploma courses and consequently will affect your program progression. You will be permitted to undertake this course maximum two times.

# **Brief Course Description**

The Essential Mathematics is delivered in the first trimester of study, and will assist you to develop and/or refresh the fundamental mathematics knowledge and skills required for success in the Diploma maths or maths related course. Essential Mathematics is a free, non-weighted, and competency based (pass/fail), which means that it does not count towards students GPA (grade point average) and consequently, you are not permitted to drop this course. However, it is compulsory and must be completed in order to graduate and it is a prerequisite for the following Diploma of Engineering and Diploma of Science courses: Mathematics 1A, Mathematics 1B, Engineering Science and Chemistry 1A and you will be given maximum two attempts to successfully complete this course.

The course comprises a review of basic skills in Arithmetic and Algebra, an introduction to functions, linear functions and quadratic functions, and an introduction to indices, logarithms and trigonometry.

# Rationale

Students are required to understand the basic mathematical principles that lie behind the study of many fields of mathematics. The Essential Mathematics course provides students with a review and an introduction to these concepts and ideas. The course is designed to consolidate and develop students' understanding of the basic concepts required for further study in mathematics or in mathematics related courses.

### Aims

The course acts as a bridge between the students' previous experience in mathematics and further study in mathematics where previous experiences have not led to a basic

consolidation of mathematical concepts. It introduces students to the mathematical way of thinking desirable for further studies in mathematics in various courses.

### Learning Outcomes

Upon successful completion of this course students will be able to:

- 1. Think mathematically.
- 2. Solve simple problems in a clear and logical manner.
- 3. Show basic mathematical knowledge in arithmetic, algebra, functions (both linear and quadratic), indices, logarithms and trigonometry.
- 4. Model simple situations in a mathematical way.

### Texts and Supporting Materials

All materials required for this course are supplied on the student portal.

All supporting material will be provided on Student Portal and through the online Maths Pathway's platform used in the Essential Mathematics course.

### **Organisation and Teaching Strategies**

The contact time in this course takes place over four (4) hours per week. Each week the lecturer is also available for individual consultation which is an opportunity for students who need extra assistance.

### **Content Schedule**

Weekly Teaching Schedule

Week	Торіс	Activity	Readings	
1 - 12	Arithmetic	Workshop	Module 1 - Arithmetic	
1 - 12	Algebra	Workshop	Module 2 - Algebra	
1 - 12	Linear Functions and Equations	Workshop	Module 3 - Linear Functions and Equations	
1 - 12	Indices and Logarithms	Workshop	Module 4 - Indices and Logarithms	
1 - 12	Quadratic Functions and Equations	Workshop	Module 5 - Quadratic Functions and Equations	

1 - 12 Trigonometry	Workshop	Module 6 - Trigonometry
---------------------	----------	-------------------------

# Summary of Assessment

This section sets out the assessment requirements for this course. No calculators nor internet sites (other than Maths Pathways) are allowed.

Item	Assessment Task	Weighting	Relevant Learning Outcomes	Due Date
1	Maths Pathways Diagnostic Tests. Students must complete four diagnostic tests as soon as possible. No calculators nor internet sites (other than Maths Pathways) are allowed. Students will complete all diagnostic tests during class time and supervised by their teacher.	N/A	N/A	Week 1 & 2
2	Maths Pathways Test No calculators nor internet sites (other than Maths Pathways) are allowed. Students will complete hand written test first, online test second and reflection last. All testing will be done during class time and supervised by a teacher.	N/A	1-4	Week 2

3	Maths Pathways Test No calculators. No internet, except Maths Pathways.	N/A	1-4	Week 3
4	Maths Pathways Test No calculators. No internet, except Maths Pathways.	N/A	1-4	Week 4
5	Maths Pathways Test No calculators. No internet, except Maths Pathways.	N/A	1-4	Week 5
6	Maths Pathways Test No calculators. No internet, except Maths Pathways.	N/A	1-4	Week 6
7	Maths Pathways Test No calculators. No internet, except Maths Pathways.	N/A	1-4	Week 7
8	Maths Pathways Test No calculators. No internet, except Maths Pathways.	N/A	1-4	Week 8
9	Maths Pathways Test No calculators. No internet, except Maths Pathways.	N/A	1-4	Week 9
10	Maths Pathways Test	N/A	1-4	Week 10

	No calculators. No internet, except Maths Pathways.			
11	Maths Pathways Test No calculators. No internet, except Maths Pathways.	N/A	1-4	Week 11
12	Maths Pathways Test No calculators. No internet, except Maths Pathways.	N/A	1-4	Week 12

### Assessment Details

Students will be undertaking the Maths Pathway's program and will be required to achieve a mastery level on the prescribed Maths Pathway's modules. The mastery level is at least the Level 9 in the following maths areas: Number and Place Value, Fractions and Decimals, Patterns and Algebra, Linear and Non-Linear relationships, Pythagoras and Trigonometry, Logarithms and Quadratics. This is applicable for the students enrolled into the Engineering and Science programs.

Students will be tested every week, in class, under the supervision of a teacher. The assessments will be composed of two portions, a handwritten personalised test and an online personalised test based on their previous week's homework. Any module that is not mastered will be highlighted and retested in the following week's test. Students will complete handwritten portion first, online portion second and reflection last. All these must be done during class time and supervised by a teacher. Students are not allowed to use calculators nor any other internet sites other than Maths Pathways during their tests.

### Submission and Return of Assessment Tasks

Normally you will be able to collect your assignments in class within two [2] days of the due date for submission of the assessment task.

# **Retention of Originals**

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the course.

# Extensions

Extensions of time for assessment are not applicable in this course.

### Assessment Feedback

Marks awarded for assessment items will also be available on the on-line grades system on the Student Website within fourteen [2] days of the due date.

### Generic Skills

Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

Generic Skills	Taught	Practised	Assessed
Written Communication	Yes	Yes	Yes
Oral Communication		Yes	
Information Literacy			
Secondary Research			
Critical and Innovative Thinking	Yes	Yes	Yes
Academic Integrity	Yes	Yes	Yes
Self Directed Learning		Yes	
Team Work	Yes	Yes	Yes
Cultural Intelligence			
English Language Proficiency		Yes	

# Academic Integrity

Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's

and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, pre-meditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your lecturers, tutors and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

In the case of a breach of academic integrity made against a student he or she may request the guidance and support of a Griffith College Student Learning Advisor or Student Counsellor.

Please ensure that you are familiar with the <u>Griffith College Academic Integrity Policy</u>; this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Academic Integrity Policy on the Griffith College website – Policy Library.

# **Risk Assessment Statement**

There are no out of the ordinary risks associated with this course.

# Copyright © - Griffith College

Note: For all Diploma level programs, Griffith College acknowledges content derived from Griffith University.