

Engineering Analysis 1A

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1 Introduction

1.1 Assessment

Online assessments using MyMathLab worth 35% and a January examination worth 65%. You must get above 40% in this exam for your coursework marks to count.

1.2 Getting Help

All lectures are recorded and available on blackboard.

Office hours are Monday 11-12 in A123 EC.

There is also an Engineering Mathematics Cafe from the 9th October every Tuesday, Wednesday and Thursday from 1 to 3 in A027 EC.

2 Linear Algebra

In general a linear equation may have m equations and n unknowns.

2.1 Gauss Elimination

Gauss elimination is a method of solving simultaneous equations that involves converting the set of equations into a matrix. For example:

$$x_1 + 2x_2 + 3x_3 + x_4 = 5$$

$$2x_1 + x_2 + x_3 + x_4 = 3$$

$$x_1 + 2x_2 + x_3 = 4$$

$$x_2 + x_3 + 2x_4 = 0$$

x_1	x_2	x_3	x_4	1
1	2	3	1	5
2	1	1	1	3
1	2	1	0	4
0	1	1	2	0