



# Mathematics and Engineering Science (City & Guilds)

**Aims** This unit enables the learner to develop the skills in and understanding of mathematics and science to facilitate progression onto awards that require mathematics and science as core requirements. This module may assist those with a trade or similar background who wish to progress to a level 6 or 7 programme of study in engineering by addressing their maths and Science skills and knowledge deficit. The programme is assessed through a series of coursework and assessments over the duration of the course and is designed to build confidence in the subject areas. It is primarily aimed at those learners who feel that maths and science are not their strong points. It will allow learners to progress to higher education where a knowledge and understanding of practical engineering principles of mathematics and engineering science topics is required. **Entry Requirements** Leaving Certificate or equivalent qualification. **Content** There are **ten** learning outcomes to this unit. Mathematics: The learner will:

1. Be able to perform calculations involving indices, logarithms and algebra
2. Be able to perform calculations using trigonometry
3. Be able to perform calculations using calculus
4. Be able to perform calculations involving statistics

Science: The learner will:

5. Be able to perform tests to determine stress, strain and elasticity of materials
6. Be able to solve problems involving kinematics
7. Be able to solve problems involving dynamics
8. Be able to solve problems involving bending beams
9. Be able to solve problems involving fluids
10. Be able to demonstrate the effects of electromagnetism and alternating current

Students will be required to study outside of class time to successfully complete this module.

**Assessment/Examinations** This unit will be assessed by an assignment containing centre devised practical tasks and short-answer questions provided by City & Guilds.

**Award:**City & Guilds Award 331 in Advanced Mathematics and Engineering Science

**Department:**Mechanical & Automobile Engineering

**Campus:**LIT Moylish

**Level:**NA

**Duration:**28 Weeks

28 Weeks, 3 hours per week

Tuesday from 7.00pm to 10.00pm

The proposed commencement date is Tuesday 24th September 2019

**Course Location:**LIT Moylish Campus, Limerick

**Application Deadline:**13th September 2019

## Entry Requirements:

Leaving Certificate or equivalent qualification

Weeks

**Course Fees:**

€650, payable to LIT upon registration.

Additional City and Guilds Assessment fees and registration fee will also apply. These fees will be collected by the exams office during the course of the programme.

**Contact:**

**Further Information**

Contact: Department of Flexible Learning

Tel: 061 293802

Email: [Flexible@lit.ie](mailto:Flexible@lit.ie)

**For Academic Related Queries**

Contact: Ciaran O'Loughlin

Email: [Ciaran.oloughlin@lit.ie](mailto:Ciaran.oloughlin@lit.ie)