A Level Mathematics

Course Title: A Level Mathematics	**LARS/QAN Code:** 6031333X
Level: Three	**Awarding Organisation:** Edexcel
Delivery: Classroom based	**Start Date:** September 2023
Location: Headlands School	Url: http://www.headlandsschool.co.uk/
Cost: Covered by EFA funding	**Duration:** 2 years
Full-time or Part-time: Full-time	**Attendance:** Daytime

Who is the course for:

It is desirable that candidates achieve a GCSE grade '7' or above in Mathematics to be accepted onto this course as, without this level of prior attainment, students may struggle to make enough progress to achieve a good grade in this subject.

Entry requirements:

Standard entry requirement for A Level programme, including a minimum of a grade 6 in GCSE Maths.

What you'll learn:

This course will extend mathematical skills and techniques encountered at GCSE. Students will develop their understanding of mathematics in order to apply a rigorous and logical approach to problem solving. The course consists of pure and applied topics.

There are three overarching themes:

- OT1: Mathematical argument, language and proof
- OT2: Mathematical problem solving
- OT3: Mathematical modelling

The subject content is split into three main sections:

Pure Maths consisting of proof, algebra and functions, coordinate geometry in the (x,y) plane, sequences and series, trigonometry, exponentials and logarithms, differentiation, integration, numerical methods, and vectors.

Statistics consisting of statistical sampling, data presentation and interpretation, probability, statistical distributions and statistical hypothesis testing.

Mechanics consisting of quantities and units in mechanics, kinematics, forces and Newton's laws and moments.

The qualification is linear, meaning that students will sit all their exams at the end of the course.

How you'll learn:

Mathematical techniques are modelled and discussed during lessons and then pupils develop fluency through completion of work during independent study time.

How you'll be assessed:

At the end of the 2 years, pupils will sit 3 examination papers each of which lasts 2 hours. 2 papers will assess the Pure Maths content and the 3rd will assess the Applied Maths content

Where next:

Career opportunities include Accountancy, Engineering, Computer Programming, Medicine and Teaching. Many employers recognise people with A-Level Maths as being excellent logicians and problem solvers.