

# Mathematica

# NEWSLETTER

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## Mathematics and National Development

**SOCIETIES AND GOVERNMENTS** around the world recognise the importance of mathematics for national development. Over this century, the fabric of society has become more and more underpinned by mathematical ideas. As a result, a major development in mathematics education in this century has been the increased amount of mathematics that all citizens are expected to know. At the beginning of this century, adequately educated people may have learned only arithmetic and measurement, but now a basic mathematics education includes ideas from algebra, geometry and statistics as well. In addition, the mathematics that is required for modern technology has greatly expanded.

Technological leaders need a mathematics education that takes into account both the new uses of mathematics in science and technology and the new ways in which mathematics can be done with information technology.

Mathematics has been regarded as essential to a liberal education at least since Plato maintained that proficiency in Mathematics was a prerequisite for the study of philosophy. Today, a good education in mathematics is important because of its usefulness in careers such as environmental studies, business, engineering, medicine, and psychology, as well as in the biological, mathematical, and physical sciences.

For Africa to achieve its global position and to improve the living standard of its citizens, it must invest in Mathematics related programs.

## NEWS:

CEMC / YCF / MoBSE / UTG Science Students' Association prepare for Summer Mathematics Program (SMP) 2012 in 20 schools.

**OPPORTUNITY** for International Internship and Volunteers is available for Sciences and Mathematics Professionals in YCF 2012/13 Programs. **Apply NOW!**

## MATHS EDUCATION

### For Students and Teachers

#### WHY INVEST IN MATHS?

Students who graduate with degrees that generally require more maths and science tend to earn more after graduation according to a new survey on starting salaries for college graduates.

Many degree courses do not require specific A level subjects, but, of those that do, Maths is by far the subject most commonly required.

If you study engineering, you will use maths for most of your courses.

Studying economics requires you not only be able to handle data and work with figures, but also to understand the concepts underlying economic questions. You will use maths to calculate compound interest, and arithmetic series to calculate growth of investments.

Medical students have to take courses in statistics, which is not surprising given that much of today's medical knowledge is evidence-based. Mathematics is even necessary in many of the non-lab sciences, such as psychology and archaeology.

Lower ranked universities will in general not require maths and have lower entry standards.

#### CLICK FOR WHY TO INVEST IN MATHS:

[www.mathscareers.org.uk](http://www.mathscareers.org.uk)

**THINK MATHEMATICS**

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