

BSc (Hons) Mathematics & Statistics

The BSc (Hons) Mathematics and Statistics is a programme of study that covers topics across the whole range of mathematical areas and statistical fields, with opportunity to specialise further on statistics. Our curriculum is built on a variety of themes, which run through all academic years of the programme; mathematical methods, statistical methods, analysis, probability, algebra, mechanics, computational mathematics, computational statistics and data analysis.

A variety of innovative teaching and assessment methods challenge the students to apply their mathematical and statistical knowledge and skills to real-world problems. Moreover, the programme develops communication skills, such as delivering oral presentations and designing conference style posters. The latter years of the programme have a number of specialist optional modules that will enable students to focus their degree towards their personal interests.

Overall, the BSc (Hons) Mathematics and Statistics programme provides students with sufficient in-depth knowledge to enable them to embark on further studies or apply that knowledge in the industry. Graduates of mathematical sciences can be employed in several areas, such as education, biology, economics, engineering, genetics, marketing, medicine, psychology, public health and sports, and work as statisticians, data analysts, risk analysts, biostatisticians and quality analysts, among many.

The BSc (Hons) Mathematics and Statistics programme is accredited by the Institute of Mathematics and its Applications (IMA), the UK's professional and learned society for qualified and practising mathematicians.





BSc (Hons) **Mathematics** & Statistics

YEAR 1	S	E
COMPULSORY Discrete Mathematics From Geometry into Algebra Functions, Vectors & Calculus Introduction to Probability & Statistics English Language I English Language II	YL YL YL YL 1 2	10 10 10 10 10
YEAR 2	S	E
COMPULSORY Introduction to Algebra & Linear Algebra Introduction to Real Analysis Introduction to Mechanics Computational Mathematics Theory of Probability & Statistics	YL YL YL YL YL	10 10 10 10 10
OPTIONAL Academic Writing Study & Research Skills History of Mathematics	YL YL YL	10 10 10
YEAR 3	S	E
COMPULSORY Ordinary Differential Equations Further Real Analysis Numerical Analysis Linear Models	YL YL YL YL	10 10 10 10
OPTIONAL Vector Calculus Nonparametric Statistics Survey Methodology Algebraic Structures Cryptology University elective	YL 1 2 YL YL YL !	10 5 5 10 10 5/10
YEAR 4	S	E
COMPULSORY Complex Analysis Stochastic Processes Computational Statistics & Data Analysis	YL YL YL	10 10 10
OPTIONAL Fields & Galois Theory PDEs & Integral Transforms Time Series Multivariate Analysis Mathematics Project Biostatistics & Epidemiology Financial Statistics Operational Research Actuarial Mathematics & Statistics University Elective	YL YL YL YL 1 1 2 2 YL !	10 10 10 10 10 5 5 10 5 5/10

SCHOLARSHIPS AVAILABLE

CAREER OPTIONS

Mathematics offers a diverse and rewarding range of careers. Examples include working in education, academic research, consultancies, accountancy, financial services, insurance companies, IT and Computing, telecommunications, and healthcare to name but a few sectors. For further information you can visit www.math-scareers.org.uk (managedand maintained by the Institute of Mathematics and its Applications).

These are valuable contributions to the Cypriot economy and equip both local and international students to compete in the global employment market. Mathematicians and Statisticians are ranked by **www.careercast.com** as some of the best jobs based on criteria including income, job outlook, work environment and stress. Other highly ranked jobs including those of a data scientist and of an actuary are highly mathematical and attract many people with a very strong mathematical background.

PROFESSIONAL ACCREDITATION

The BSc (Hons) Mathematics and Statistics programme is accredited by the Institute of Mathematics and its Applications (IMA), the UK's professional and learned society for qualified and practising mathematicians. The programme will meet the educational requirements of the Chartered Mathematician designation, awarded by the IMA, when it is followed by subsequent training and experience in employment to obtain equivalent competences to those specified by the UK Quality Assurance Agency (QAA) for taught master's degrees.

ENTRY REQUIREMENTS

The minimum requirements are:

> Apolytirion or High School Leaving Certificate, or 96 A' Level points (new Tariff system) in relevant subjects. > Proof of English Language knowledge to a score of at least IELTS 5.5, or other equivalent according to the Common European Framework of Reference for Languages (CEFR).