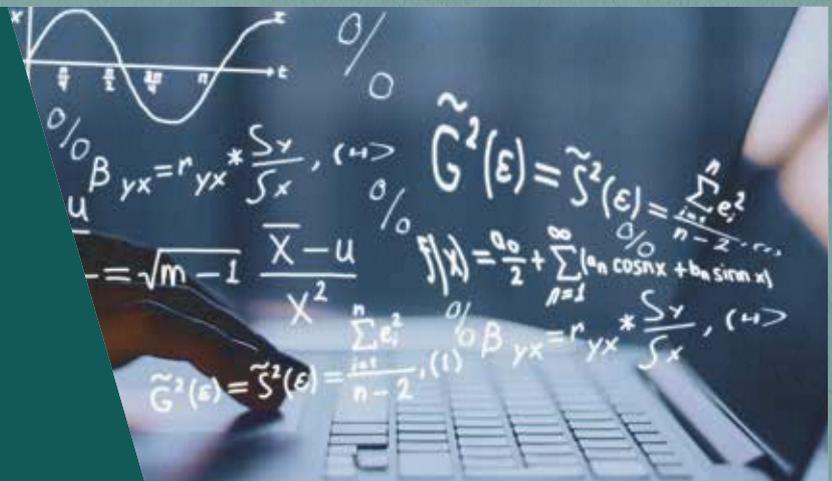


# BSc (Hons) Mathematics and Statistics.

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.

# BSc (Hons) Mathematics and Statistics.



## MODULES

		Semester	ECTS			Semester	ECTS	
<b>YEAR 1</b>	<b>COMPULSORY</b>			<b>YEAR 3</b>	<b>COMPULSORY</b>			
	Discrete Mathematics	1&2	10		Further Real Analysis	1&2	10	
	From Geometry into Algebra	1&2	10		Ordinary Differential Equations	1&2	10	
	Functions, Vectors and Calculus	1&2	10		Numerical Analysis	1&2	10	
	Introduction to Probability and Statistics	1&2	10		Linear Models	1&2	10	
	English Language I	1	10		<b>OPTIONAL (Choose modules of 20 ECTS in total)</b>			
English Language II	2	10	Algebraic Structures	1&2	10			
<b>YEAR 2</b>	<b>COMPULSORY</b>			Cryptology	1&2	10		
	Introduction to Algebra and Linear Algebra	1&2	10	Nonparametric Statistics	1	5		
	Real Analysis	1&2	10	Survey Methodology	2	5		
	Mechanics	1&2	10	University Elective*				
	Computational Mathematics	1&2	10	<b>YEAR 4</b>	<b>COMPULSORY</b>			
	Theory of Probability and Statistics	1&2	10		Complex Analysis	1&2	10	
	<b>OPTIONAL (Choose modules of 10 ECTS in total)</b>	1&2	10		Stochastic Processes	1&2	10	
	History of Mathematics	1&2	10		Computational Statistics and Data Analysis	1&2	10	
	Academic Writing	1&2	10		<b>OPTIONAL (Choose modules of 30 ECTS in total)</b>			
	Study and Research Skills	1&2	10		Fields and Galois Theory	1&2	10	
			PDEs and Integral Transforms		1&2	10		
			Time Series		1&2	10		
			Multivariate Analysis		1&2	10		
			Mathematics Project		1&2	10		
			Biostatistics and Epidemiology	1	5			
			Financial Statistics	1	5			
			Operational Research	2	5			
			Actuarial Mathematics and Statistics	2	5			
			University Elective*					

\*University electives for year 3 and 4 can be either year-long, semester 1 or 2 modules, a 5-ECTS or 10-ECTS module, and they depend on the remaining ECTS to complete the year given the optional modules chosen. The Course Leader will guide the student accordingly.

The University reserves the right to make amendments to programmes in order to improve the quality of learning content and outcomes.

## 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.mathscareers.org.uk](http://www.mathscareers.org.uk) (managed and 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](http://www.careercast.com) as two 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.

## ENTRY REQUIREMENTS

The minimum entry requirements are:

- > A score of 16.5 in the Apolytirion including subjects areas such as Mathematics, Science or Technology; or 80 A' Level points (new Tariff system) in subject areas such as Mathematics, Science or Technology; or another international equivalent.

- > In addition, an IELTS score of 5.0 or equivalent is required.

## SCHOLARSHIPS AVAILABLE HERE