

## Statistics

All statistics courses for examination in Part III assume that you have taken an introductory course in statistics and one in probability, with syllabuses that cover the topics in the Cambridge undergraduate courses Probability in the first year and Statistics in the second year. It is helpful if you have taken more advanced courses, although not essential. For Applied Statistics and other applications courses, it is helpful, but not essential, if you have already had experience of using a software package, such as R or Matlab, to analyse data. The statistics courses assume some mathematical maturity in terms of knowledge of basic linear algebra and real analysis. However, they are designed to be taken without a background in measure theory, although some knowledge of measure theory is helpful for Topics in Statistical Theory.

The desirable previous knowledge for tackling the statistics courses in Part III is covered by the following Cambridge undergraduate courses. The syllabuses are available online at

<http://www.maths.cam.ac.uk/undergrad/schedules>

<i>Year</i>		<i>Courses</i>
First	<i>Essential</i>	Probability
Second	<i>Essential</i>	Statistics
	<i>Helpful for some courses</i>	Markov Chains
Third	<i>Helpful</i>	Principles of Statistics
	<i>Helpful</i>	Statistical Modelling
	<i>For additional background</i>	Probability and Measure

If you have not taken the courses marked ‘essential’ then you should review the relevant material over the vacation. If you have more time, then it would be helpful to review other courses as indicated.