

BACHELOR OF SCIENCE DEGREE IN APPLIED STATISTICS WITH IT COURSE CATALOGUE

Year 1

Semester I		
MAC 107:	Introduction to Actuarial Science	1C
MAC 105:	Microeconomics	1C
MAS 101:	Descriptive Statistics	1C
MAS 103:	Introduction to Probability Theory	1C
MMA 100:	Basic Mathematics	1C
MMA 111:	Introduction to Calculus	1C
MIT 101:	Basic Concepts of IT	1C
MIT 103:	Web Browsing and Communication	1C
Semester II		
MAS 102:	Probability and Distribution Theory I	1C
MAS 106:	Introduction to Biostatistics	1C
MAC 104:	Linear Models and Forecasting	1C
MAC 106:	Macroeconomics	1C
MAC 102:	Fundamentals of Actuarial Mathematics I	1E
MMA 103:	Linear Algebra I	1C
MMA 101:	Analytical Geometry	1C
MIT 104:	Descriptive Statistical; Analysis and Presentation	1C
MIT 102:	Handling Data	1C

Year 2

Semester I		
MAS 201:	Sample Surveys	1C
MAS 203:	Economic Statistics	1C
MAS 207:	Probability and Distribution Theory II	1C
MMA 215:	Calculus	1C
MMA 202:	Vector Analysis	1C
MIT 201:	Statistical Computing I	1C
MIT 203:	Collecting and Organising Data	1C
Semester II		
MAS 202:	Principles of Statistical Inference	1C
MAS 204:	Demography and Social Statistics	1C
MAC 206:	Actuarial Mathematics I	1E
MAC 210:	Investment and Asset Management I	1E
MMA 201:	Linear Algebra II	1C
MMA 206:	Algebraic Structures	1E
MMA 216:	Multivariate Calculus	1C
MMA 208:	Introduction to Analysis	1C
MIT 202:	Data Management	1C
MIT 204:	Scientific Report Reading, Writing and Presentation	1C

Year 3

Semester I		
MAS 303:	Estimation Theory	1C

MAS 305:	Stochastic Processes I	1C
MAS 307:	Theory of Sampling Techniques	1C
MAS 309:	Time Series Analysis and Forecasting	1C
MAS 311:	Statistical Demography I	1E
MAS 313:	Principles of Econometrics	1E
MAS 315:	Statistical Genetics	1E
MMA 300:	Real Analysis I	1C
MMA 301:	Ordinary Differential Equations I	1C
MIT 301:	Computer Based Survey Techniques	1C
MIT 303:	Computers Applied to Mathematics	1C
Semester II		
MAS 302:	Mathematical Methods	1C
MAS 304:	Test of Hypothesis	1C
MAS 306:	Statistical Modelling	1C
MAS 308:	Analysis of Experimental Designs I	1E
MAS 310:	Stochastic Decision Models I	1E
MAS 312:	Statistical Computing II	1E
MAS 314:	Research Methodology	1C
MAC 300:	Financial Mathematics II	1E
MAC 302:	Methods of Actuarial Investigations	1E
MAC 304:	Actuarial Life Contingencies I	1E
MAC 306:	Financial Economics	1E
MMA 303:	Complex Analysis I	1C
MMA 312:	Operations Research I	1C
MIT 304:	Introduction to Object-Oriented Programming	1C
MIT 302:	Statistical Computing II	1C
Semester III		
MAS 317:	Industrial Attachment	1C

Year 4

Semester I		
MAS 401:	Further Distribution Theory	1C
MAS 403:	Non-Parametric Methods	1C
MAS 405:	Analysis of Experimental Designs II	1E
MAS 407:	Further Time Series Analysis	1E
MAS 409:	Further Sample Survey Theory and Methods	1E
MAS 411:	Stochastic Decision Models II	1E
MAS 413:	Stochastic Models for Biological Processes	1E
MAS 415:	Biometric Models	1E
MAS 417:	Statistical Demography II	1E
MAS 419:	Econometric Models I	1E
MAS 421:	Stochastic Processes II	1E
MAS 423:	Practical Statistics	1C
MAS 425:	Labour Dynamics	1E
MAS 427:	Agricultural Indices	1E
MAS 429:	Energy Analysis	1E
MAS 431:	Teaching of Statistics	1E
MAC 403:	Actuarial Life Contingencies II	1E
MAC 411:	Theory of Business Decisions	1E

MAC 415:	Survival Analysis	1E
MMA 405:	Partial Differential Equations I	1C
MMA 420:	Operations Research II	1E
MIT 401:	Bayesian Modelling	1C
MIT 403:	Writing Macros	1C
Semester II		
MAS 402:	Bayesian Inference and Decision Theory	1C
MAS 408:	Multivariate Methods	1C
MAC 402:	Modelling II	1E
MAC 406:	Risk and Credibility Theory	1E
MAC 408:	Risk Mathematics	1E
MAC 410:	Fundamentals of General Insurance	1E
MAS 406:	Robust Methods and Non-Parametrics	1E
MAS 410:	Statistical Model Building	1E
MAS 412:	Stochastic Models for Social Processes	1E
MAS 414:	Survey Research Methods	1E
MAS 416:	Quality Control Methods	1E
MAS 418:	Applied Population Analysis	1E
MAS 420:	Applied Demography	1E
MAS 422:	Econometric Models II	1E
MAS 424:	Applied Econometrics	1E
MAS 426:	Statistical Computing III	1E
MAS 428:	Response Surface Methodologies	1E
MAS 430:	Educational Statistics	1E
MAS 432:	Health Indicators	1E
MAS 434:	Government Financing Structure	1E
MAS 436:	Environmental/Ecological Indicators	1E
MAS 438:	Statistical Organization	1E
MMA 402:	Measure Theory	1C
MMA 414:	Fourier Analysis	1E
MMA 429:	Operations Research III	1E
MIT 402:	Problem-Based Statistical Analysis	1C
MIT 404:	Algorithms	1C