BACHELOR OF SCIENCE DEGREE IN ACTUARIAL SCIENCE 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

MAC 102:	Fundamentals of Actuarial Mathematics I	1C
MAC 104:	Linear Models and Forecasting	1C
MAC 106:	Macroeconomics	1C
MAS 102:	Probability and Distribution Theory I	1C
MAS 106:	Introduction to Biostatistics	1E
MMA 101:	Analytical Geometry	1C
MMA 103:	Linear Algebra I	1C
MIT 104:	Descriptive Statistical; Analysis and Presentation	1C
MIT 102:	Handling Data	1C

Year 2

Semester I

MAC 201:	Financial Mathematics I	1C
MAC 203:	Fundamentals of Actuarial Mathematics II	1C
MAC 205:	Mathematical Modelling	1C
MAS 201:	Sample Surveys	1E
MAS 203:	Economic Statistics	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

MAC 206:	Actuarial Mathematics I	1C
MAC 210:	Investment and Assets Management I	1C
MAS 204:	Demography & Social Statistics	1C
MAS 202:	Principles of Statistical Inference	1E
MMA 201:	Linear Algebra II	1C
MMA 216:	Multivariate Calculus	1E
MMA 208:	Introduction to Analysis	1C
MIT 202:	Data Management	1C
MIT 204:	Scientific Report Reading, Writing & Presentation	1C

Year 3

Semester I

MAC 303:	Actuarial Mathematics II	1C
MAC 305:	Pension Mathematics	1C
MAS 305:	Stochastic Processes I	1C
MMA 300:	Real Analysis I	1C

MMA 301:	Ordinary Differential Equations I	1C
MAS 303:	Estimation Theory	1E
MIT 301:	Computer-Based Survey Techniques	1C
MIT 303:	Computers Applied to Mathematics	1C

Semester II

MAC 300:	Financial Mathematics II	1C
MAC 302:	Methods of Actuarial Investigations	1C
MAC 304:	Actuarial Life Contingencies I	1C
MAC 306:	Financial Economics	1C
MAS 304:	Test of Hypothesis	1E
MAS 314:	Research Methodology	1C
MMA 312:	Operations Research I	1E
MMA 303:	Complex Analysis 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

MAC 401:	Mathematics of Demography and Graduation	1E
MAC 403:	Actuarial Life Contingencies II	1C
MAC 405:	Investment and Asset Management II	1C
MAC 407:	Principles of Financial Management	1C
MAC 409:	Project in Actuarial Science	1C
MAC 415:	Survival Analysis	1C
MAS 403:	Non-parametric Methods	1E
MMA 405:	Partial Differential Equations I	1C
MMA 420:	Operations Research II	3E
MAS 405:	Analysis of Experimental Designs II	3E
MAS 407:	Further Time Series Analysis	3E
MAS 415:	Biometric Models	3E
MAS 419:	Econometric Models I	3E
MAS 421:	Stochastic Processes II	3E
MIT 401:	Bayesian Modelling	1C
MIT 403:	Writing Macros	1C

Semester II

MAC 404:	Computational Finance	1C
MAC 406:	Risk and Credibility Theory	1C
MAC 408:	Risk Mathematics	1C
MAC 410:	Fundamentals of General Insurance	1E
MAS 402:	Bayesian Inference and Decision Theory	1C
MAS 408:	Multivariate Methods	1C
MAS 410:	Statistical Model Building	1E
MMA 402:	Measure Theory	1C
MIT 402:	Problem-Based Statistical Analysis	1C
MIT 404:	Algorithms	1C