

SEMESTER I			
TOPICS	HOURS	SHORT TEST	
INTRODUCTION	2		
Approximations and Errors	2	+	
Points in Space	2		
Financial Mathematics	2		
TEST	1		
Sampling and Types of Data	1		
Measures of Central Tendency	2	+	
Box and Whisker, Cumulative Frequency	2		
Measures of Dispersion	2		
TEST	1		
Correlation and Regression Line	1		
Regression Line and Spearman's correlation	2	+	
Bivariate Stats Review	2		
LONG TEST	1		
Operations on Vectors	2	+	
Dot Product	2		
Cross Product	2		
Applications	6		
TEST	1		
Lines	1		
Voronoi Diagrams	4	+	
Operations on Complex Numbers	2		
Polar Form and Exponential Form	2		
Applications	2		
TEST	1		
Probability - introduction	1		
Conditional Probability	2	+	
Independent Events	1		
Bayes	1		
Discrete Probability Distribution	2	+	
Games	2		
Properties of $Y=aX+b$	1		
Binomial Distribution	4		
Poisson Distribution	3		
Review	2		
LONG TEST	2		
Matrices - introduction	2	+	
Inverse of a Matrix	2		
Eigenvalues and Eigenvectors	2		
Review of Matrices	2		
Markov Chains	4		
Transformations	4		
TEST	1		
Intro to Graphs	1		
Adjacency Matrices	2	+	
Transition Matrices	2		
Algorithms on Graphs	6		
LONG TEST	2		

SEMESTER II		
TOPICS	HOURS	SHORT TEST
Limits	2	
Derivative from first principles	2	+
Rules for differentiation	4	
Derivative - practice	2	
TEST	1	
Tangent and Normal Lines	3	
Properties of Curves	4	+
Applications	8	
LONG TEST	2	
Linear Function	1	
Quadratic Function	1	
Cubic Function	2	
Exponential Function	2	
Logarithmic Function	2	
Trigonometric Function	2	+
Direct and Inverse Variations	2	
Power Functions	2	
Modelling Practice	4	
TEST	1	
Arithmetic Sequences	3	+
Geometric Sequences	3	
Sequences Practice	2	
LONG TEST	2	
Area under Curve	2	
Antidifferentiation	2	
Rules for Integration	4	
Integration Practice	2	+
Definite Integral	2	
Areas	4	
Volumes	4	
TEST	1	
Kinematics	8	
Review	8	
LONG TEST	2	
Total:	96	