

MODULE MAP OF PROGRAMME LEARNING OUTCOMES: Dip DM																
Programme:																
	Knowledge					Practical					Key Skills					
	Disc maths ideas	Algorithm formulation methods	Power of computer programmes	Interconnections	Analyse info	Math. Model	Reason critically	Model problems	Use algorithms	Use computer programmes	Write clearly	Use packages	Numerical enhancement	Appropriate method	Learn from feedback	Meet deadlines
Module	A1	A2	A3	A4	B1	B2	B3	C1	C2	C3	D1	D2	D3	D4	D5	D6
MA902	◆			◆	◆	◆	◆	◆			◆		◆	◆	◆	◆
CE802	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
CE883	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
CE884	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆	◆		◆	◆	◆
CE885	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MA305		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MA306	◆	◆		◆	◆	◆	◆	◆	◆		◆		◆	◆	◆	◆
MA308			◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MA310			◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MA314	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MA315	◆	◆		◆	◆	◆	◆	◆	◆		◆		◆	◆	◆	◆
MA922	◆	◆		◆	◆	◆	◆	◆			◆		◆	◆	◆	◆

MODULE MAP OF PROGRAMME LEARNING OUTCOMES

Programme: MSc IFDMwA

		Knowledge																
	Math/Finance/Cognitive Psychology ideas	Power and limitations	Interconnections	Current research	Analyse info	Reason critically	Integrate information	Do research	Model Fin probs with math tools	Analyse/evaluate financial/company data	Mathematical word processing	Literature search	Write report	Give presentation	Write clearly	Appropriate method	Learn from feedback	Meet deadlines
Module	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4
MA902	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
BE162	◆	◆			◆	◆			◆	◆					◆	◆	◆	◆
PS475	◆	◆			◆	◆									◆		◆	◆
PS921	◆	◆			◆	◆									◆		◆	◆
PS922	◆	◆			◆	◆									◆		◆	◆
BE150	◆	◆			◆	◆			◆	◆					◆	◆	◆	◆
BE160	◆	◆			◆	◆			◆	◆					◆	◆	◆	◆
BE351	◆	◆			◆	◆			◆	◆					◆	◆	◆	◆
BE352	◆	◆			◆	◆			◆	◆					◆	◆	◆	◆
BE354	◆	◆			◆	◆			◆	◆					◆	◆	◆	◆
BE357	◆	◆			◆	◆				◆					◆	◆	◆	◆
BE650	◆	◆			◆	◆			◆	◆					◆	◆	◆	◆
BE651	◆	◆			◆	◆			◆	◆					◆	◆	◆	◆
EC965	◆	◆			◆	◆			◆						◆	◆	◆	◆
MA303	◆				◆	◆			◆						◆	◆	◆	◆
MA305	◆				◆	◆			◆						◆	◆	◆	◆
MA308	◆				◆	◆			◆						◆	◆	◆	◆
MA922	◆	◆			◆	◆			◆						◆	◆	◆	◆

MODULE MAP OF PROGRAMME LEARNING OUTCOMES

Programme: MSc M&F

	Knowle					Cognitive					Practical				
	Math/Finance ideas	Formulate algorithms	Analyse info	Express problem mathematically	Reason critically	Model Fin probs with math tools	Use algorithms	Write clearly	Numerical enhancement	Appropriate method	Learn from feedback	Meet deadlines			
Module	A1	A2	B1	B2	B3	C1	C2	D1	D2	D3	D4	D5			
MA303	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆	◆		
MA306	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆	◆	◆		
MA308		◆	◆	◆	◆		◆	◆	◆	◆	◆	◆	◆		
MA311		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆		
MA902	◆		◆	◆	◆	◆		◆	◆	◆	◆	◆	◆		
MA922	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆	◆		
BE351	◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆		
BE352	◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆		
BE356	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆		
BE953	◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆		
BE954	◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆		
BE651	◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆		
EC907	◆		◆	◆	◆	◆	◆	◆		◆	◆	◆	◆		

MODULE MAP OF PROGRAMME LEARNING OUTCOMES: M Dip SOR															
Programme:															
	Knowledge							Practical			Key Skills				
	Stat/OR ideas	Aid Soc Sci	Limitations of models	Analyse info	Express problem mathly	Reason critically	Analyse data & OR problems	Use algorithms	Use programmes	Write clearly	Use packages	Numerical enhancement	Appropriate method	Learn from feedback	Meet deadlines
Module	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3	D4	D5	D6
MA305	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆
MA306	◆	◆	◆	◆	◆	◆	◆	◆							
MA308	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MA310	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MA311	◆			◆	◆	◆		◆		◆		◆	◆	◆	◆
MA314				◆	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆
MA902	◆			◆	◆	◆				◆		◆	◆	◆	◆
MA922	◆			◆	◆	◆	◆	◆		◆		◆	◆	◆	◆
CE833				◆		◆		◆	◆	◆	◆		◆	◆	◆
CE802			◆	◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆
CE883	◆			◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆
CE701	◆			◆	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆
EC965	◆	◆	◆	◆		◆	◆	◆		◆		◆	◆	◆	◆
EC968	◆	◆		◆		◆	◆	◆		◆		◆	◆	◆	◆
EC969	◆	◆	◆	◆		◆	◆	◆		◆		◆	◆	◆	◆

MODULE MAP OF PROGRAMME LEARNING OUTCOMES:

2012-13

Programme: **Graduate Diploma in Mathematics**

		Intellectual Skills				Practical Skills					
Module		A1	B1	B2	C1			D1	D2	D3	D4
Level 5	MA201	Linear Algebra	◆	◆	◆	◆		◆	◆	◆	◆
	MA203	Analysis	◆	◆	◆	◆		◆	◆	◆	◆
	MA205	Linear Programming	◆	◆	◆	◆		◆	◆	◆	◆
	MA206	Mathematical Methods	◆	◆	◆	◆		◆	◆	◆	◆
	MA207	Probability & Statistics I	◆	◆	◆	◆		◆	◆	◆	◆
	MA208	Probability & Statistics II	◆	◆	◆	◆		◆	◆	◆	◆
	MA209	Introduction to Numerical Methods	◆	◆	◆	◆		◆	◆	◆	◆
	MA210	Vector Calculus	◆	◆	◆	◆		◆	◆	◆	◆
	MA224	The Laws of Physics	◆	◆	◆	◆		◆	◆	◆	◆
	Level 6	MA302	Complex Variables	◆	◆	◆	◆		◆	◆	◆
MA303		Differential Equations	◆	◆	◆	◆		◆	◆	◆	◆
MA305		Nonlinear Programming	◆	◆	◆	◆		◆	◆	◆	◆
MA306		Combinatorial Optimization	◆	◆	◆	◆		◆	◆	◆	◆
MA308		Linear Models	◆	◆	◆	◆		◆	◆	◆	◆
MA310		Experimental Design	◆	◆	◆	◆		◆	◆	◆	◆
MA311		Mathematics of Portfolios	◆	◆	◆	◆		◆	◆	◆	◆
MA314		Graph Theory	◆	◆	◆	◆		◆	◆	◆	◆
MA315		Cryptography & Coding	◆	◆	◆	◆		◆	◆	◆	◆
MA333		Mathematical Biology	◆	◆	◆	◆		◆	◆	◆	◆
MA830		Project (one term)	◆	◆	◆	◆		◆	◆	◆	◆
MA831		Project (full year)	◆	◆	◆	◆		◆	◆	◆	◆
MA832		Teaching-related project	◆	◆	◆	◆		◆	◆	◆	◆

MODULE MAP OF PROGRAMME LEARNING OUTCOMES: Msc DM

Programme:		Knowledge		Cognitive					Practical				Key Skills										
	Disc maths ideas	Algorithm formulation methods	Power of computer programmes	Interconnections	Current research	Analyse info	Math. Model	Reason critically	Integrate info	Do research	Model problems	Use algorithms	Use computer programmes	Math word process	Literature search	Write report	Give presentation	Write clearly	Use packages	Numerical enhancement	Appropriate method	Learn from feedback	Meet deadlines
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
MA981	◆			◆	◆	◆	◆	◆	◆	◆	◆			◆	◆	◆	◆	◆		◆	◆	◆	◆
MA902	◆			◆	◆	◆	◆	◆	◆	◆	◆			◆	◆	◆	◆	◆		◆	◆	◆	◆
CE802	◆	◆	◆	◆		◆		◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
CE883	◆	◆	◆	◆		◆		◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
CE884	◆	◆	◆	◆		◆		◆			◆	◆	◆					◆	◆		◆	◆	◆
CE885	◆	◆	◆	◆		◆	◆	◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
MA305	◆	◆	◆	◆		◆	◆	◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
MA306	◆	◆		◆		◆	◆	◆			◆	◆						◆		◆	◆	◆	◆
MA308			◆	◆		◆	◆	◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
MA310			◆	◆		◆	◆	◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
MA314	◆	◆	◆	◆		◆	◆	◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
MA315	◆	◆		◆		◆	◆	◆			◆	◆						◆		◆	◆	◆	◆
MA922	◆	◆		◆		◆	◆	◆			◆							◆		◆	◆	◆	◆

MODULE MAP OF PROGRAMME LEARNING OUTCOMES

Programme: MSc IFDMwA

Knowledge																			
	Math/Finance/Cognitive Psychology ideas	Power and limitations	Interconnections	Current research	Analyse info	Express mathematically	Reason critically	Integrate information	Do research	Model Fin probs with math tools	Analyse/evaluate financial/company data	Mathematical word processing	Literature search	Write report	Give presentation	Write clearly	Appropriate method	Learn from feedback	Meet deadlines
Module	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4
MA981	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MA902	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
BE162	◆	◆			◆	◆				◆	◆					◆	◆	◆	◆
PS475	◆	◆			◆	◆										◆		◆	◆
PS921	◆	◆			◆	◆										◆		◆	◆
PS922	◆	◆			◆	◆										◆		◆	◆
BE150	◆	◆			◆	◆				◆	◆					◆	◆	◆	◆
BE160	◆	◆			◆	◆				◆	◆					◆	◆	◆	◆
BE351	◆	◆			◆	◆				◆	◆					◆	◆	◆	◆
BE352	◆	◆			◆	◆				◆	◆					◆	◆	◆	◆
BE354	◆	◆			◆	◆				◆	◆					◆	◆	◆	◆
BE357	◆	◆			◆	◆					◆					◆	◆	◆	◆
BE650	◆	◆			◆	◆				◆	◆					◆	◆	◆	◆
BE651	◆	◆			◆	◆				◆	◆					◆	◆	◆	◆
EC965	◆	◆			◆	◆				◆						◆	◆	◆	◆
MA303	◆				◆	◆				◆						◆	◆	◆	◆
MA305	◆				◆	◆				◆						◆	◆	◆	◆
MA308	◆				◆	◆				◆						◆	◆	◆	◆
MA922	◆	◆			◆	◆				◆						◆	◆	◆	◆

MODULE MAP OF PROGRAMME LEARNING OUTCOMES

Programme: MSc M&F

	Knowledge				Cognitive					Practical										
	Math/Finance ideas	Formulate algorithms	Interconnections	Current research	Analyse info	Express problem mathematically	Reason critically	Integrate information	Do research	Model Fin probs with math tools	Use algorithms	Mathematical word processing	Literature search	Write report	Give presentation	Write clearly	Numerical enhancement	Appropriate method	Learn from feedback	Meet deadlines
Module	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	D5
MA981	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆	◆
MA303	◆	◆			◆	◆	◆			◆						◆	◆	◆	◆	◆
MA306	◆	◆			◆	◆	◆				◆					◆	◆	◆	◆	◆
MA308		◆			◆	◆	◆				◆					◆	◆	◆	◆	◆
MA311		◆			◆	◆	◆			◆	◆					◆	◆	◆	◆	◆
MA902	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆	◆
MA922	◆	◆			◆	◆	◆			◆						◆	◆	◆	◆	◆
BE351	◆	◆			◆	◆	◆			◆	◆					◆		◆	◆	◆
BE352	◆	◆			◆	◆	◆			◆	◆					◆		◆	◆	◆
BE356	◆	◆			◆	◆	◆			◆	◆					◆	◆	◆	◆	◆
BE953	◆	◆			◆	◆	◆			◆	◆					◆		◆	◆	◆
BE954	◆	◆			◆	◆	◆			◆	◆					◆		◆	◆	◆
BE651	◆	◆			◆	◆	◆			◆	◆					◆		◆	◆	◆
EC907	◆				◆	◆	◆			◆	◆					◆		◆	◆	◆

MODULE MAP OF PROGRAMME LEARNING OUTCOMES: Msc ORCS

Programme:		Knowledge					Cognitive					Practical						Key Skills					
		OR/CS ideas	Algorithm formulation methods	Power of computer program	Interconnections	Current research	Analyse info	Math. Model	Reason critically	Integrate info	Do research	Construct algorithms	Use programs	Math word process	Literature search	Write report	Give presentation	Write clearly	Use packages	Numerical enhancement	Appropriate method	Learn from feedback	Meet deadlines
Module		A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	D5	D6
MA981		◆			◆	◆	◆	◆	◆	◆	◆			◆	◆	◆		◆		◆	◆	◆	◆
MA305		◆	◆	◆			◆	◆	◆			◆	◆					◆	◆	◆	◆	◆	◆
MA306		◆	◆				◆	◆	◆			◆						◆		◆	◆	◆	◆
MA308			◆	◆			◆	◆	◆				◆					◆	◆	◆	◆	◆	◆
MA310			◆				◆	◆	◆				◆					◆	◆	◆	◆	◆	◆
MA311							◆	◆	◆									◆		◆	◆	◆	◆
MA902		◆			◆	◆	◆	◆	◆	◆	◆			◆	◆	◆	◆	◆		◆	◆	◆	◆
MA922							◆	◆	◆									◆		◆	◆	◆	◆
CE833		◆	◆	◆			◆		◆				◆					◆	◆		◆	◆	◆
CE651		◆	◆	◆			◆		◆				◆					◆	◆		◆	◆	◆
CE802		◆	◆	◆			◆		◆			◆	◆					◆	◆		◆	◆	◆
CE883		◆	◆	◆			◆		◆				◆					◆	◆		◆	◆	◆
CE885		◆	◆	◆			◆		◆			◆	◆					◆	◆	◆	◆	◆	◆
CE804		◆	◆	◆			◆		◆			◆	◆					◆	◆	◆	◆	◆	◆

MODULE MAP OF PROGRAMME LEARNING OUTCOMES:

Programme: M.Sc. STATDA

	Knowledge					Cognitive					Practical						Key Skills					
	Stat/DA ideas	Aid Soc Sci	Limitations of models	Interconnections	Current research	Analyse info	Express mathematically	Reason critically	Integrate info	Do research	Analyse data	Use programmes	Math word process	Literature search	Write report	Give presentation	Write clearly	Use packages	Numerical enhancement	Appropriate method	Learn from feedback	Meet deadlines
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	D5	D6
MA981	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MA305						◆	◆	◆			◆	◆					◆	◆	◆	◆	◆	◆
MA308	◆	◆	◆			◆	◆	◆			◆	◆					◆	◆	◆	◆	◆	◆
MA310	◆	◆	◆			◆	◆	◆			◆	◆					◆	◆	◆	◆	◆	◆
MA311			◆			◆	◆	◆									◆		◆	◆	◆	◆
MA902	◆			◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆		◆	◆	◆	◆
MA922	◆					◆	◆	◆									◆		◆	◆	◆	◆
CE802	◆		◆			◆	◆	◆			◆	◆					◆	◆	◆	◆	◆	◆
EC501	◆		◆			◆	◆	◆			◆	◆					◆	◆	◆	◆	◆	◆
EC943	◆	◆				◆	◆	◆									◆		◆	◆	◆	◆
EC965	◆	◆	◆			◆	◆	◆			◆						◆		◆	◆	◆	◆
EC968	◆					◆		◆			◆						◆		◆	◆	◆	◆
EC969	◆	◆	◆			◆	◆	◆			◆	◆					◆	◆	◆	◆	◆	◆

MODULE MAP OF PROGRAMME LEARNING OUTCOMES:

Programme: M.Sc STATE

	Knowledge					Cognitive					Practical					Key Skills							
	Stat/Econometric ideas	Aid application areas	Limitations of models	Interconnections	Current research	Analyse info	Express problem mathematically	Reason critically	Integrate info	Do research	Analyse data	Use algorithms	Use computer programmes	Math word process	Literature search	Write report	Give presentation	Write clearly	Use packages	Numerical enhancement	Appropriate method	Learn from feedback	Meet deadlines
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
EC981	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆			◆	◆	◆	◆	◆		◆	◆	◆	◆
MA308	◆	◆	◆			◆	◆	◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
MA310	◆	◆	◆			◆	◆	◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
MA902	◆			◆	◆	◆	◆	◆	◆	◆				◆	◆	◆	◆	◆		◆	◆	◆	◆
MA922						◆	◆	◆										◆		◆	◆	◆	◆
EC501	◆	◆	◆			◆	◆	◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
EC907	◆	◆				◆		◆			◆	◆	◆					◆		◆	◆	◆	◆
EC943	◆	◆				◆	◆	◆										◆		◆	◆	◆	◆
EC965	◆	◆	◆			◆	◆	◆			◆	◆						◆		◆	◆	◆	◆
EC967	◆	◆	◆			◆	◆	◆			◆	◆						◆		◆	◆	◆	◆
EC968	◆	◆				◆		◆			◆	◆						◆		◆	◆	◆	◆

MODULE MAP OF PROGRAMME LEARNING OUTCOMES: MSC Stat/OR																							
Programme:																							
	Knowledge					Cognitive					Practical					Key Skills							
	Stat/OR ideas	Aid Soc Sci	Limitations of models	Interconnections	Current research	Analyse info	Express problem mathly	Reason critically	Integrate info	Do research	Analyse data & OR problems	Use algorithms	Use programmes	Math word process	Literature search	Write report	Give presentation	Write clearly	Use packages	Numerical enhancement	Appropriate method	Learn from feedback	Meet deadlines
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
MA981	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆			◆	◆	◆	◆	◆		◆	◆	◆	◆
MA305	◆	◆	◆			◆	◆	◆			◆	◆	◆					◆	◆		◆	◆	◆
MA306	◆	◆	◆			◆	◆	◆			◆	◆	◆										
MA308	◆	◆	◆			◆	◆	◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
MA310	◆	◆	◆			◆	◆	◆			◆	◆	◆					◆	◆	◆	◆	◆	◆
MA311	◆					◆	◆	◆				◆	◆					◆		◆	◆	◆	◆
MA314						◆	◆	◆				◆	◆					◆	◆	◆	◆	◆	◆
MA902	◆			◆	◆	◆	◆	◆	◆	◆				◆	◆	◆	◆	◆		◆	◆	◆	◆
MA922	◆					◆	◆	◆			◆	◆	◆					◆		◆	◆	◆	◆
CE833						◆		◆				◆	◆					◆	◆		◆	◆	◆
CE802			◆			◆	◆	◆			◆	◆	◆					◆	◆		◆	◆	◆
CE883	◆					◆	◆	◆			◆	◆	◆					◆	◆		◆	◆	◆
CE701	◆					◆	◆	◆				◆	◆					◆	◆		◆	◆	◆
EC965	◆	◆	◆			◆		◆			◆	◆				◆		◆		◆	◆	◆	◆
EC968	◆	◆				◆		◆			◆	◆				◆		◆		◆	◆	◆	◆
EC969	◆	◆	◆			◆		◆			◆	◆						◆		◆	◆	◆	◆