B1317 Bachelor of Science, Mathematics and Statistics — **2020 Semester 1**

Academic Chair: Dr Doug Fletcher (D.Fletcher@murdoch.edu.au)

Prerequisites: If you have not achieved a final grade of Satisfactory in Mathematics Specialist ATAR (or Mathematics Specialist 3C/3D) you may need to complete up to two prerequisite units depending on your mathematics background.

Mathematics Background	Course Plan
Mathematics Methods ATAR and Mathematics Specialist ATAR or Mathematics 3C/3D and Mathematics Specialist 3C/3D	Use the course plan below.
Mathematics Methods ATAR or Mathematics 3C/3D	Use the course plan below, with MAS182 Applied Mathematics in place of an Option in 2020 S1.
Mathematics Applications ATAR or Mathematics 2C/2D	You need MAS164 Fundamentals of Mathematics and MAS182 Applied Mathematics. This may extend the duration of your course. Please contact the Academic Chair or myMurdoch Advice for an appropriate course plan.

For mathematics background not stated above, please contact the <u>Academic Chair</u> to clarify your course plan.

	Semester 1		Semester 2	
	BSC100 Building Blocks for Science	3pts	MSP100 Career Learning: Managing Your Career	3pts
	MAS162 Foundations of Discrete Mathematics	3pts	MAS183 Statistical Data Analysis	3pts
2020	Option	3pts	MAS161 Calculus and Matrix Algebra	3pts
	Option	3pts	Option	3pts
		12pts		12pts
	Research Skills Unit (Choose from list below)	3pts	Option	3pts
	MAS220 Mathematical Methods	3pts	Option	3pts
2021	Select 1 unit from Group 1A (below)	3pts	Option	3pts
	Select 1 unit from Group 1B (below)	3pts	University-wide breadth unit	3pts
		12pts		12pts
	Research Skills Unit (Choose from list below)	3pts	Option	3pts
	Select 3 units from Group 2 (below)	9pts	Option	3pts
2022			Option	3pts
			University-wide breadth unit	3pts
		12pts		12pts

Group 1A (1 unit)	MAS222 Probability and Statistical Inference MAS224 Biostatistical Methods	MAS223 Applied Statistics
Group 1B (1 unit)	MAS221 Mathematical Modelling MAS222 Probability and Statistical Inference MAS223 Applied Statistics MAS224 Biostatistical Methods MAS225 Discrete Mathematics and Management Science	
Group 2 (3 units)	MAS351 Environmental and Biological Modelling MAS353 Statistical Design and Data Analysis	MAS352 Time Series Analysis MAS354 Modelling and Simulation
Research Skills (2 units)	MAS220 Mathematical Methods MAS222 Probability and Statistical Inference ICT283 Data Structures and Abstractions ICT373 Software Architectures	MAS351 Environmental and Biological Modelling MAS352 Time Series Analysis ICT374 Operating Systems and Systems Programming

Important: This course plan is a sample only and must be read in conjunction with the course structure, unit prerequisites and enrolment options as per the online <u>Handbook</u>. Your course plan will vary depending on your entry date and your academic progression. Every semester, if you change anything in your course, or you fail units, contact your Academic Chair to discuss how your course plan will change.