Mathematics with a Modern Language (German) (4 Years) [BSc]

Year 2 Programme Structure

The second year of this degree programme consists of 50 credits of compulsory (= mandatory) MATH course units in Mathematics and one compulsory 20-credit GERM course unit in the German Language, plus three additional 10-credit MATH course units and one additional 20-credit GERM course unit chosen from those optional courses listed in the table below.

The second year of this degree programme includes the additional progression rule:-

For the compulsory German Language course unit (GERM51040) you must achieve an overall mark of 40% to pass the year and continue your studies with the year abroad.

You can access all the course descriptions via your 'My Manchester' student portal by searching on the subject code or course unit description by school. Course descriptions on each course unit includes information on assessment criteria's, lecturer, syllabus, learning outcomes, etc., and they are available from the 'My Course' tab in 'My Manchester' by searching the subject code or you can browse them from the Schools 'Study' website.

Students on this programme can if they wish substitute one optional 10-credit MATH course unit with a University College (UCIL) course unit, for which students will need to complete the course unit permission form. Details of all UCIL courses can be found at: http://www.college.manchester.ac.uk/courses/.

Students should note that the 80 credits of Mathematics course units are split equally between the two semesters, but the 40 credits of language courses are not split equally because of the optional 20-credit language course in one semester. Students therefore have to take 70 credits in one semester with 50 credits in the other, and should therefore think carefully about their workload and commitments when choosing the optional course unit.

Students should also note that the optional MATH course units listed below are available to all students on mathematics degree programmes. This means the course units can sometimes become full; it may be that a full course will have a 'waiting list' and that students on such a list will (after, say, a week of the semester) get onto the course, but this cannot be guaranteed, and it is therefore sensible to register for your chosen courses as early as possible.

Further, there are a large number of MATH options offered in semester 2, and their timetabling is not within the control of the School of Mathematics, so there may be clashes between courses; students are therefore advised to check the timetable information before attempting to register.

For all issues to do with course selection you are strongly advised to consult with your Academic Advisor.

Level 2 course units

Description	Semester	Requirement	Credit Rating	Level
MATH20111 - Real Analysis	1	Mandatory	10	2
MATH20201 - Algebraic Structures 1	1	Mandatory	10	2
MATH20411 - Partial Differential Equations and Vector Calculus B	1	Mandatory	10	2
MATH20701 - Probability 2	1	Mandatory	10	2
MATH20142 - Complex Analysis	2	Mandatory	10	2
GERM51040 - German Language 4	1 and 2	Mandatory	20	2
GERM20481 - Translating New Writing	1	Optional	20	2
GERM20222 - The German Language Today	2	Optional	20	2
GERM20262 - Weimar Culture? Art, Film and Politics in Germany, 1918-33	2	Optional	20	2
MATH20122 - Metric Spaces	2	Optional	10	2
MATH20132 - Calculus of Several Variables	2	Optional	10	2
MATH20212 - Algebraic Structures 2	2	Optional	10	2
MATH20222 - Introduction to Geometry	2	Optional	10	2

Description	Semester	Requirement	Credit Rating	Level
MATH20302 - Introduction to Logic	2	Optional	10	2
MATH20502 - Fluid Mechanics	2	Optional	10	2
MATH20512 - Classical Mechanics	2	Optional	10	2
MATH20522 - Principles of Mathematical Modelling	2	Optional	10	2
MATH20602 - Numerical Analysis 1	2	Optional	10	2
MATH20622 - Programming with Python	2	Optional	10	2
MATH20712 - Random Models	2	Optional	10	2
MATH20722 - Foundations of Modern Probability	2	Optional	10	2
MATH20802 - Statistical Methods	2	Optional	10	2
MATH20902 - Discrete Mathematics	2	Optional	10	2
MATH20912 - Introduction to Financial Mathematics	2	Optional	10	2