

Campus:	Main campus
Faculty:	Faculty of Natural Sciences, Humanities and Islamic Studies
Department:	Dept. of Mathematics
OBE coordinator	Dr Taimoor Iqbal

Note: Mapping can be done by matching the keywords or statement parts of each CLO (or course description) with SDGs. Please see the additional sheets for more details. In following table, we only need Course-SDGs mapping for all the courses.

Sr #	Code	Course	Courses and SDGs mapping															
			SDG 1 No Poverty	SDG 2 Zero Hunger	SDG 3 Good Health and Well-being	SDG 4 Quality Education	SDG 5 Gender Equality	SDG 6 Clean Water and Sanitation	SDG 7 Affordable and Clean Energy	SDG 8 Decent Work and Economic Growth	SDG 9 Industry, Innovation and Infrastructure	SDG 10 Reduced Inequality	SDG 11 Sustainable Cities and Communities	SDG 12 Responsible Consumption and Production	SDG 13 Climate Action	SDG 14 Life Below Water	SDG 15 Life on Land	SDG 16 Peace & Justice Strong Institutions
1st Semester	1 MATH-101	Calculus-I	yes		yes	yes	yes		yes	yes	yes		yes	yes	yes	yes	yes	yes
	2 MATH-102	Elements of Set Theory and Mathematical Logic	yes		yes	yes			yes	yes	yes							
2nd Semester	3 MATH-104	Calculus II	yes		yes	yes	yes		yes	yes	yes		yes					yes
	4 MATH-105	Statistics	yes	yes	yes	yes	yes		yes	yes	yes		yes				yes	yes
3rd Semester	5 MATH-106	Software Packages	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes	yes
	6 MATH-201	Calculus III	yes		yes	yes	yes		yes	yes	yes		yes					yes
4th Semester	7 MATH-203 & 203L	Scientific Programming	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes			yes
	8 MATH-204	Linear Algebra			yes	yes		yes		yes	yes			yes				yes
5th Semester	9 MATH-205	Ordinary Differential Equations	yes		yes	yes	yes		yes	yes	yes		yes					yes
	10 MATH-206	Discrete Mathematics								yes	yes						yes	yes
6th Semester	11 MATH-211	Operation Research-I	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes			yes
	12 MATH-301	Real Analysis-I				yes				yes								
7th Semester	13 MATH-302	Vector and Tensor Analysis		yes											yes	yes		yes
	14 MATH-303	Probability	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes			yes
8th Semester	15 MATH-304	Topology				yes												
	16 MATH-312	Operation Research II	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes			yes
Elective	17 MATH-305	Modern Algebra-I				yes				yes								
	18 MATH-307	Classical Mechanics				yes				yes						yes		yes
6th Semester	19 MATH-308	Partial Differential Equations	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes			yes
	20 MATH-309	Complex Analysis				yes				yes								
7th Semester	21 MATH-310	Differential Geometry				yes				yes								
	22 MATH-311	Real Analysis-II				yes				yes								
8th Semester	23 MATH-400	Number Theory				yes				yes								
	24 MATH-401	Numerical Analysis	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes			yes
Elective	25 MATH-403	Mathematical Physics				yes				yes								
	26 MATH-405	Integral Equations				yes				yes								
Elective	27 MATH-441	Functional Analysis				yes				yes								
	28 MATH-402	Fluid Mechanics-I	yes		yes	yes		yes	yes	yes	yes		yes	yes	yes			yes
Elective	29 MATH-404	Fluid Mechanics-II	yes		yes	yes		yes	yes	yes	yes		yes	yes	yes			yes
	30 MATH-416	Optimization Theory	yes		yes	yes		yes	yes	yes	yes		yes	yes	yes			yes
Elective	31 MATH-412	Numerical Solutions of Differential Equations	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes	yes
	32 MATH-442	Measure Theory				yes				yes								
Elective	33 MATH-443	Algebraic Topology				yes				yes								
	34 MATH-444	Convex Analysis				yes				yes								
Elective	35 MATH-445	Modern Algebra II (Rings and Modules)				yes				yes								
	36 MATH-446	Advanced Group Theory				yes				yes								
Elective	37 MATH-447	Axiomatic Set Theory				yes				yes								
	38 MATH-448	Riemannian Geometry				yes				yes								
Elective	39 MATH-449	Galois Theory				yes				yes								
	40 MATH-406	Electromagnetism				yes				yes								
Elective	41 MATH-407	Analytical Dynamics				yes				yes								
	42 MATH-408	Quantum Mechanics				yes	yes	yes	yes	yes	yes		yes	yes	yes			yes
Elective	43 MATH-409	General Relativity				yes				yes								
	44 MATH-410	Special Relativity				yes				yes								
Elective	45 MATH-411	Elastic Theory				yes				yes								
	46 MATH-417	Mathematical Modeling and Simulation	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes			yes
Elective	47 MATH-418	Dynamical Systems	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes			yes
	48 MATH-419	Mathematical Biology	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes			yes
Elective	49 MATH-420	Computational Fluid Dynamics				yes				yes						yes	yes	