

1. Students need to complete at least 20 cu of level 3 and above courses in the second major.

2ND MAJOR COMPULSORY - 50 cu													
Course	Credit Units	Pre-requisite	Excluded Combination	Grouping	Remarks	Jan 24	May 24	Jul 24	Jan 25	May 25	Jul 25	Last Presentation	Time Table
MTH105 Fundamentals of Mathematics	5		MTH101			Y	N	Y	Y	N	Y	2028/07	CRN01; Mon; Week 1, 3, 4, 5, 6, 7, 9, 11 CRN02; Mon; Week 1, 3, 4, 5, 6, 7, 9, 11
MTH107 Calculus I	5		MTH103	MTH108		Y	N	Y	Y	N	Y	2028/07	CRN01; Tue; Week 1, 3, 5, 7, 9, 11 CRN02; Tue; Week 1, 3, 5, 7, 9, 11 CRN03; Tue; Week 1, 3, 5, 7, 9, 11
MTH108 Calculus II	5	MTH107	MTH104	MTH107		Y	N	Y	Y	N	Y	2026/07	CRN01; Tue; Week 2, 4, 6, 8, 10, 12 CRN02; Tue; Week 2, 4, 6, 8, 10, 12
MTH207 Linear Algebra	5		MZS2032	MTH208		N	N	Y	N	N	Y	2028/07	CRN01; Wed; Week 1, 3, 5, 7, 9, 11 CRN02; Wed; Week 1, 3, 5, 7, 9, 11
MTH208 Advanced Linear Algebra	5	MTH207	MTH209	MTH207		Y	N	N	Y	N	N	2028/07	CRN01; Tue; Week 2, 4, 5, 6, 7, 8, 10, 12 CRN02; Tue; Week 2, 4, 5, 6, 7, 8, 10, 12

Course	Credit Units	Pre-requisite	Excluded Combination	Grouping	Remarks	Jan	May	Jul	Jan	May	Jul	Last Presentation	Time Table
						24	24	24	25	25	25		
MTH219 Fundamentals of Statistics and Probability	5	MTH107	HESZ200 2 or MZS248		Strongly recommend students to complete MTH108 before taking MTH219	Y	N	Y	Y	N	Y	2028/07	CRN01; Thu; Week 1, 3, 5, 7, 9, 11 CRN02; Thu; Week 1, 3, 5, 7, 9, 11
MTH220 Statistical Methods and Inference	5	NIL	MZS248		Strongly recommend students to complete MTH219 before taking MTH220	Y	N	Y	Y	N	Y	2028/07	CRN01; Thu; Week 2, 4, 6, 8, 10, 12 CRN02; Thu; Week 2, 4, 6, 8, 10, 12
MTH312 Real Analysis I	5	MTH103 or MTH107	MTH205			Y	N	N	Y	N	N	2026/07	CRN01; Tue; Week 1, 3, 5, 7, 9, 11
MTH316 Multivariable Calculus	5	MTH103 or MTH107	MTH211			Y	N	N	Y	N	N	2028/01	CRN01; Fri; Week 1, 3, 4, 5, 6, 7, 9, 11 CRN02; Fri; Week 1, 3, 4, 5, 6, 7, 9, 11
MTH318 Advanced Calculus	5	MTH205 or MTH312	MTH213			N	N	Y	N	N	Y	2028/07	CRN01; Fri; Week 2, 4, 6, 8, 10, 12

2ND MAJOR ELECTIVE - 10 cu

Students need to complete at least 5 cu of level 3 and above courses as 2nd major electives.

Course	Credit Units	Pre-requisite	Excluded Combination	Grouping	Remarks	Jan 24	May 24	Jul 24	Jan 25	May 25	Jul 25	Last Presentation	Time Table
ICT133 Structured Programming	5		ICT131 or ICT271		The course includes two runs on Thurs and Fri respectively. Excluded combination may be removed on a case by case basis.	Y	N	Y	Y	N	Y	2028/07	CRN01; Sun, Fri; Week 1, 3, 5, 7, 9, 11 CRN02; Sun, Thu; Week 1, 3, 5, 7, 9, 11 CRN03; Sun, Fri; Week 1, 3, 5, 7, 9, 11
ICT162 Object Oriented Programming	5	ICT133	ICT201 or ICT272		The course includes two runs on Thurs and Fri respectively. Excluded combination may be removed on a case by case basis.	Y	N	Y	Y	N	Y	2028/07	CRN01; Sun, Fri; Week 2, 4, 6, 8, 10, 12 CRN02; Sun, Thu; Week 2, 4, 6, 8, 10, 12 CRN03; Sun, Fri; Week 2, 4, 6, 8, 10, 12
ICT231 Data Structures and Algorithms I	5	ICT133	MTH223, MTH251			Y	N	N	Y	N	N	2028/07	CRN01; Sun, Fri; Week 1, 3, 5, 7, 9, 11
ICT232 Data Structures and Algorithms II	5	MTH251 or ICT231	MTH224, MTH252			N	N	Y	N	N	Y	2028/07	
MTH301 Fundamentals of Complex Analysis	5	MTH316	MZS337	MTH302		Y	N	N	Y	N	N	2028/07	CRN01; Fri; Week 1, 3, 5, 7, 9, 11
MTH302 Applied Complex Analysis	5	MTH301	MZS337	MTH301		N	N	Y	N	N	Y	2028/07	CRN01; Fri; Week 2, 4, 5, 6, 7, 8, 10, 12

Course	Credit Units	Pre-requisite	Excluded Combination	Grouping	Remarks	Jan 24	May 24	Jul 24	Jan 25	May 25	Jul 25	Last Presentation	Time Table
MTH314 Real Analysis II	5	MTH205 or MTH312	MTH206			N	N	Y	N	N	Y	2028/07	CRN01; Tue; Week 2, 4, 6, 8, 10, 12
MTH319 Mathematical Methods I	5	MTH211 or MTH316	MTH215	MTH320		N	N	Y	N	N	Y	2028/07	CRN01; Fri; Week 1, 3, 5, 7, 9, 11 CRN02; Fri; Week 1, 3, 5, 7, 9, 11
MTH320 Mathematical Methods II	5	MTH215 or MTH319	MTH217	MTH319		Y	N	N	Y	N	N	2028/07	CRN01; Fri; Week 2, 4, 6, 8, 10, 12 CRN02; Fri; Week 2, 4, 6, 8, 10, 12
MTH351 Coding Theory	5	MTH207	MTH311	MTH352		N	N	Y	N	N	Y	2028/07	CRN01; Wed; Week 1, 3, 5, 7, 9, 11
MTH352 Cryptography	5		MTH313	MTH351		N	N	Y	N	N	Y	2028/07	CRN01; Wed; Week 2, 4, 6, 8, 10, 12
MTH353 Basic Statistical Methods in Experimental Design	5	BUS105 or HBC203 or MTH220	MTH315	MTH354		N	N	Y	N	N	Y	2028/07	CRN01; Mon; Week 1, 3, 5, 7, 9, 11
MTH354 Advanced Statistical Methods in Experimental Design	5	MTH353	MTH317	MTH353		Y	N	N	Y	N	N	2028/07	CRN01; Mon; Week 2, 4, 6, 8, 10, 12
MTH355 Basic Mathematical Optimisation	5	MTH207 or MTH211 or MTH319	MTH310	MTH356		Y	N	N	Y	N	N	2028/07	CRN01; Tue; Week 1, 3, 5, 7, 9, 11
MTH356 Advanced Mathematical Optimisation	5	DSM101 or MTH211 or MTH316	MTH309	MTH355		N	N	Y	N	N	Y	2028/07	CRN01; Tue; Week 2, 4, 6, 8, 10, 12
MTH357 Applied Regression Analysis I	5	BUS105 or HBC203 or MTH220	MTH307	MTH358		Y	N	N	Y	N	N	2028/07	CRN01; Thu; Week 1, 3, 5, 7, 9, 11
MTH358 Applied Regression Analysis II	5	MTH357	MTH308	MTH357		N	N	Y	N	N	Y	2028/07	CRN01; Thu; Week 2, 4, 6, 8, 10, 12

Course	Credit Units	Pre-requisite	Excluded Combination	Grouping	Remarks	Jan 24	May 24	Jul 24	Jan 25	May 25	Jul 25	Last Presentation	Time Table
MTH359 Applied Financial Mathematics I	5	MTH220 & MTH316 or MTH217 & MTH220	MTH221	MTH360		N	N	Y	N	N	Y	2028/07	CRN01; Mon; Week 1, 3, 5, 7, 9, 11
MTH360 Applied Financial Mathematics II	5	MTH221 or MTH359	MTH222	MTH359		Y	N	N	Y	N	N	2029/07	CRN01; Mon; Week 2, 4, 6, 8, 10, 12
MTH361 Stochastic Processes I	5	MTH207 & MTH219	MTH305	MTH362		Y	N	N	Y	N	N	2028/07	CRN01; Thu; Week 1, 3, 5, 7, 9, 11
MTH362 Stochastic Processes II	5	MTH305 or MTH361	MTH306	MTH361		N	N	Y	N	N	Y	2028/07	CRN01; Thu; Week 2, 4, 6, 8, 10, 12
MTH366 Fundamentals of Graph Theory	5	MTH101 or MTH105 or MTH207	MTH303	MTH367		Y	N	N	Y	N	N	2028/07	CRN01; Wed; Week 1, 3, 5, 7, 9, 11
MTH367 Network Optimisation and Modelling	5	MTH207	MTH304	MTH366		N	N	Y	N	N	Y	2028/07	CRN01; Wed; Week 2, 4, 6, 8, 10, 12

- If the presentation status is 'Y' = the course is presenting in the semester, 'N' = the course is not presenting in the semester, 'RT' = the course has been retired and will not be presented again, 'RP' = the course has been replaced and will not be presented again.
- The information listed is subject to review and change.

Retired/Replaced List

Course	Credit Units	Status	Effective From Semester	Remarks
MTH251 Data Structures and Algorithms I	5	Retired	2024/01	ICT231
MTH252 Data Structures and Algorithms II	5	Retired	2024/01	ICT232