

Requirements	Course	UNIT
CHS & SoC Common Curriculum ¹	14 courses ²	56
Math Level 1000	MA1100 Basic Discrete Mathematics/ MA1100T Basic Discrete Mathematics (T) (<i>double count towards Computer Science Foundation</i>)	4
Math Level 2000	MA2001 Linear Algebra I (<i>double count towards Mathematics and Sciences</i>)	32-36
	MA2002 Calculus (<i>double count towards Mathematics and Sciences</i>)	
	MA2101/MA2101S Linear Algebra II	
	MA2104 Multivariable Calculus	
	MA2108/MA2108S Mathematical Analysis I	
	MA2116/MA2216/ST2131 Probability (<i>double count towards Mathematics and Sciences</i>)	
	Pass any two additional courses coded MA22XX/MA32XX/MA42XX (except MAx288/MAx289/MA4288x)	
Math Level 3000	Pass five courses coded MA32xx/MA42xx/MA52xx/MA62xx (except MAx288/MAx289/MA4288x/MA5232/MA5266) or ST3236 or ST4238	20-23
Math Level 4000	Pass MA4198 Mathematics Capstone Project	4
Computer Science Foundation	MA1100 Basic Discrete Mathematics/ MA1100T Basic Discrete Mathematics (T) ³ (<i>double count towards Math Level 1000</i>)	36
	CS2030S Programming Methodology II	
	CS2040S Data Structures and Algorithms	
	CS2100 Computer Organisation	
	CS2101 Effective Communication for Computing Professionals ⁴	
	CS2103T Software Engineering	
	CS2106 Introduction to Operating Systems	
	CS2109S Introduction to AI and Machine Learning (<i>double count towards CHS Artificial Intelligence pillar</i>)	
CS3230 Design and Analysis of Algorithms		
Computer Science Breath and Depth	Complete 32 UNIT of computing courses satisfying the following constraints: <ul style="list-style-type: none"> • Satisfy at least one CS Focus Area completing 3 courses in the Area Primaries with at least one course at Level-4000 or above. • Complete at least 12 UNIT at level-4000 or above. • Complete at least 6 UNIT and at most 12 UNIT of Industry Experience courses⁵. • Students with GPA of 4.00 or higher may opt to replace the Industry Experience courses with the programme's dissertation course. • Students who aim for Honours (Highest Distinction) must pass the programme's dissertation course. • All courses except Industry Experience must be CS/IFS/CP- coded. • At most 12 UNIT CP-coded courses (aside from Industry Experience). 	32
Mathematics and Sciences	MA2002 Calculus ⁶ (<i>double count towards Math Level 2000</i>)	16
	MA2001 Linear Algebra I ⁷ (<i>double count towards Math Level 2000</i>)	
	MA2116/ST2131 Probability ⁸ (<i>double count towards Math Level 2000</i>)	
	ST2132 Mathematical Statistics	
	Total Units	200 - 206

Notes:

1. CHS-SoC DDP students are exempted from 3 Cross-disciplinary/Interdisciplinary courses in the SoC Common Curriculum. MA-CS DDP students to read HSH1000 in place of ES2660.
2. CHS Artificial Intelligence pillar is fulfilled by Computer Science Foundation course CS2109S.
3. MA1100 / MA1100T replaces CS1231S Discrete Structures for MA-CS DDP.
4. CS2101 and CS2103T are to be taken together in the same semester.
5. Industry experience courses:
 - a. A 6-month internship through one of the following: CP3880 Advanced Technology Attachment Programme (12 UNITS), IS4010 Industry Internship Programme (12 UNITS), or TR3202 Start-up Internship Programme (12 UNITS);
 - b. A 3-month internship through one of the following: CP3200 Internship (6 UNITS), CP3202 Internship II (6 UNITS), CP3107 Computing for Voluntary Welfare Organisations (6 UNITS), CP3110 Computing for Voluntary Welfare Organisations II (6 UNITS);
 - c. Other forms of industry experience approved by the Department of Computer Science. Certain NOC internships are not CP-coded but can also be used to satisfy Breadth-and-Depth requirements as if they were CP-coded.
6. MA2002 Calculus replaces MA1521 Calculus for Computing for MA-CS DDP.
7. MA2001 Linear Algebra I replaces MA1522 Linear Algebra for Computing for MA-CS DDP.
8. MA2116/ST2131 Probability and ST2132 Mathematical Statistics replace ST2334 Probability and Statistics for MA-CS DDP.

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