Some	important	prerequisites
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Prerequisite	Required for
	2-adic computer science (W3)
Introduction to number theory (W1)	The distribution of prime numbers (W4)
	The abc's of polynomialand (W4)
	Extremal graph theory (W2)
	The Ra(n)do(m) Graph (W2)
Introduction to graph theory (W1)	Szemerédi's {theorem, regularity lemma} (W3)
	Problem solving: graph theory (W3)
	Baire necessities for Banach–Tarski (W4)
	Quantum computation (W2)
	Teichmüller theory of the torus (W2)
	Schubert calculus (W3)
	Representation theory (week 1) (W3)
	The 17 wallpaper patterns (W3)
	Machine learning (NOT neural networks) (W3)
Introduction to infear algebra (W1)	Algebraic solutions to Painlevé VI (W4)
	Problem solving: cheating in geometry (W4)
	High-dimensional potatoes (W4)
	Algebraic topology: homology (W4)
	Finite fields (W4)
	Representation theory (week 2) $(W4)$
Introduction to real analysis: epsilons and deltas (W1)	Cantor before set theory (W4)
	Ring theory (W2)
	Bonus group theory part 2 (W2)
	Grammatical group generation (W2)
	Representation theory (week 1) $(W3)$
	The 17 wallpaper patterns (W3)
Introduction to group theory (W1)	Commutative algebra and algebraic geometry (W3)
	Infinite groups are weird (W3)
	Algebraic solutions to Painlevé VI (W4)
	Algebraic topology: homology (W4)
	Representation theory (week 2) $(W4)$
	Baire necessities for Banach–Tarski (W4)
	Introduction to Galois theory (W4)
	Commutative algebra and algebraic geometry (W3)
Ring theory (W2)	A curious connection between p -adic distances and triangulations of a square (W4)
	Finite fields (W4)
	Introduction to Galois theory (W4)

<u>Note:</u> When subject A is listed as a prerequisite for course B, this indicates that the Mathcamp course on subject A is *sufficient* as a prerequisite for B.

Often, the Mathcamp class on A covers a lot more than is necessary for B. If you already know some of subject A, consult the specific prerequisites in the class description for B or talk to the teacher of B to find out if what you know is enough. You can also talk to the teacher of A to find out when they plan to cover the parts that you already know.

(Also see other side!)

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Class	Requires
Ring theory (W2)	Introduction to group theory (W1)
Extremal graph theory (W2)	Introduction to graph theory (W1)
Quantum computation (W2)	Introduction to linear algebra (W1)
Bonus group theory part 2 (W2)	Introduction to group theory (W1)
The $Ra(n)do(m)$ Graph (W2)	Introduction to graph theory (W1)
Teichmüller theory of the torus (W2)	Introduction to linear algebra (W1)
Grammatical group generation (W2)	Introduction to group theory (W1)
2-adic computer science (W3)	Introduction to number theory (W1)
Schubert calculus (W3)	Introduction to linear algebra (W1)
Bepresentation theory (week 1) (W3)	Introduction to linear algebra (W1)
representation theory (week 1) (W3)	Introduction to group theory (W1)
Szemerédi's {theorem, regularity lemma} (W3)	Introduction to graph theory (W1)
The 17 wellpaper patterns $(W3)$	Introduction to linear algebra (W1)
The IT wanpaper patterns (W5)	Introduction to group theory (W1)
Commutative algebra and algebraic geometry (W3)	Introduction to group theory (W1)
Commutative algebra and algebraic geometry (WS)	Ring theory (W2)
Machine learning (NOT neural networks) (W3)	Introduction to linear algebra (W1)
Problem solving: graph theory (W3)	Introduction to graph theory (W1)
Infinite groups are weird (W3)	Introduction to group theory (W1)
Algebraic solutions to Painlevé VI (W4)	Introduction to linear algebra (W1)
	Introduction to group theory (W1)
A curious connection between p -adic distances and triangulations of a square (W4)	Ring theory (W2)
The distribution of prime numbers (W4)	Introduction to number theory (W1)
Problem solving: cheating in geometry (W4)	Introduction to linear algebra (W1)
The abc's of polynomialand (W4)	Introduction to number theory (W1)
High-dimensional potatoes (W4)	Introduction to linear algebra (W1)
Algebraic topology: homology (W4)	Introduction to linear algebra (W1)
	Introduction to group theory (W1)
Finite fields $(W4)$	Introduction to linear algebra (W1)
	Ring theory (W2)
Cantor before set theory (W4)	Introduction to real analysis: epsilons and deltas (W1)
Representation theory (week 2) $(W4)$	Introduction to linear algebra (W1)
	Introduction to group theory (W1)
Baire necessities for Banach–Tarski (W4)	Introduction to graph theory (W1)
	Introduction to group theory (W1)
Introduction to Galois theory (W4)	Introduction to group theory (W1)
Information to Guide incory (114)	Ring theory (W2)

Have a class you want to take? Here are the prerequisites!

(Also see other side!)