

# ZIMSEC Maths O'Level Student's Syllabus

This is a free-download/Print Student's syllabus for ZIMSEC Maths 4004 O'LEVEL. We developed the syllabus according to the Maths course on [www.primaed.com](http://www.primaed.com).



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1.	Basic Number Systems 1	a) Directed Numbers (+/-/×/÷) b) Algebra of Directed Numbers c) Prime Numbers d) HCF & LCM e) Algebra of HCF & LCM	<input type="checkbox"/>	2.	Linear Equations	a) Factorization b) Expansion c) Solving Linear Equations (one variable) d) Word Problems	<input type="checkbox"/>
3.	Basic Number Systems	a) Number Bases b) Solving Equations involving Number Bases. c) Length, Area, and Volume Ratios. d) Limits & Accuracy	<input type="checkbox"/>	4.	Algebraic techniques	a) Formula & Change of Subject b) Substitution	<input type="checkbox"/>
5	Linear Equations 2	a) Simultaneous Equations b) Solving Equations involving Number Bases. c) Length, Area, and Volume Ratios. d) Limits & Accuracy	<input type="checkbox"/>	6	Inequalities	a) Sign Interpretation & Presentation b) Logic & Reason involving Inequalities c) Solving Linear Inequalities	<input type="checkbox"/>
7	Variation	a) Direct b) Inverse c) Joint d) Partial	<input type="checkbox"/>	8	Language & Notation	a) Sets and Notation b) Venn Diagrams c) Solving Equations Involving Venn Diagrams.	<input type="checkbox"/>
9	Indices & Logarithms	a) Laws of Indices b) Solving Equations involving Indices c) Laws of Logarithms d) Solving Equations involving logarithms	<input type="checkbox"/>	10	Measures & Mensuration	a) Time and SI units b) Perimeter, Area, and Volume c) Density	<input type="checkbox"/>
11	Graphs 1  Linear	a) Drawing Straight-line Graphs b) Simultaneous Equations. c) Travel Graphs c) Linear Programming	<input type="checkbox"/>	12	Quadratic Equations	a) Factorization. b) Completing the square. c) Solving Quadratic Equations. d) Word Problems	<input type="checkbox"/>
13	Graphs 2  Quadratic	a) Drawing Quadratic Equation Curves b) Solving Quadratic Equations.	<input type="checkbox"/>	14	Matrices	a) dimension, determinant, and inverse. d) miscellaneous equations e) simultaneous equations	<input type="checkbox"/>
15	Vectors	a) Factorization. b) Completing the square. c) Solving Quadratic Equations. d) Word Problems	<input type="checkbox"/>	16	Trigonometry 1	a) Pythagoras Theorem. b) Ratios  <i>Sin Cos Tan</i> c) Area of a Triangle	<input type="checkbox"/>
17	Trigonometry 2	a) Sine and Cosine Rule. b) Bearing	<input type="checkbox"/>	18	Points, Angles, & Lines	a) Factorization. b) Completing the square. c) Solving Quadratic Equations. d) Word Problems	<input type="checkbox"/>
19	Polygons	a) Translation, and Rotation, reflection. b) Enlargement. c) Stretch d) Shear	<input type="checkbox"/>	20	Circles and Locus	a) Translation, and Rotation, reflection. b) Enlargement. c) Stretch d) Shear	<input type="checkbox"/>
21	Transformation	a) Translation, and Rotation, reflection. b) Enlargement. c) Stretch d) Shear	<input type="checkbox"/>	22	Measures & Mensuration	a) Time b) SI units c) Perimeter, Area, & Volume d) Density	<input type="checkbox"/>
23	Others (Shapes)	a) Lines of symmetry b) rotational symmetry c) congruency	<input type="checkbox"/>	24	Statistics	a) collecting, representing, and interpreting graphical data. b) mean, mode, median c) ogive	<input type="checkbox"/>
25	Probability	a) Mutually Exclusive & Independent Events. b) Single & Combined Events c) Tree Diagrams & outcome tables	<input type="checkbox"/>	26	Consumer Arithmetic	a) Charts, graphs, & tables b) Premiums & High Purchase c) Discount & Commission	<input type="checkbox"/>