

Subject Selections – Table of Mathematics Courses – Summary

Course	General Comments	University Prerequisite or Desirable	Concepts	Exams	TISC Scaling	Assessment Types	Prerequisites
Mathematics Foundations	Suitable for students who have not yet passed OLNA. Provides the opportunity for students to prepare for post-school options of employment & further training	N/A	Using functional numeracy in the real world and practical situations involving whole numbers and money, length, capacity, time, data tables, perimeter, area and volume.	No	No	Response (50%) Practical Application (50%)	Currently at OLNA Level1 or Level2 (discussion with Leader of Learning)
Mathematics Essentials	Suggested as the minimum for students not wanting to do an ATAR maths course. Suitable for many TAFE courses and jobs with limited use of maths.	N/A	Basic Calculations, Percentages and Rates; Using Formulas for Practical Purposes; Measurement; Graphs; Representing and Comparing Data; Percentages, Rates and Ratios; Time; Motion	No	N/A	Practical Application and Statistical Investigation Process (50%) Response (50%)	Completion of Yr 10 Core or 80% in Maths Pathway
Mathematics Applications	Suitable for general and biological sciences, business, computing degrees. Does not have any calculus. Moderate algebra skills required.	Science – Agriculture, Applied Geology, Environmental Biology, Molecular Biology Geographic Information Science, Animal Science, Biological Sciences, Environmental Management and Sustainability, Biomedical Science, Conservation and Wildlife Biology, Aviation Computing - Computer Systems and Networking, Computer Science, Games Software Design and Production Health – Nursing, Chiropractic, Health Promotion/Nutrition, Safety and Environment, Laboratory Medicine, Nutrition, Speech Pathology, Cognitive Neuroscience and Health Finance – Commerce, Business, Banking Administration, Accounting, Economics, Business Information Systems Surveying, Construction Management Education – Primary Education Psychology, Human Resource Management	Consumer Arithmetic; Algebra and Matrices; Shape and Measurement; Univariate Data Analysis and the Statistical Investigation Process; Applications of Trigonometry; Linear Equations and their Graphs.	Yes	Subtract approx. 8%.	Investigation (20%) Response (40%) Exams (40%)	Yr 10 General 60% in Core 1 or Completion of Yr 10 Ext 1 or 2
Mathematics Methods	Excellent pathway for strong maths students looking at doing a degree in Engineering, Physical/Chemical Sciences or Mathematics and high level computing degrees. Excellent background in high level statistics suitable for a wide range of professions. Requires excellent algebra skills. Not affected by scaling at top end, bottom end scaled up.	Science – Medical Imaging Science, Applied Geology, Geophysics, Geog Information Science, Environmental Science, Aeronautical Technology, Veterinary Science, Physics, Pharmacy Surveying Law/Commerce Mathematics and Statistics, Mathematics, Actuarial Science Education – mathematics Engineering - Civil & Construction, Mining, Chemical, Computer Systems, Mechanical	Functions and Graphs; Trigonometric Functions; Counting and Probability; Exponential Functions; Arithmetic and Geometric Sequences and Series; Introduction to Differential Calculus	Yes	Add approx. 0 - 5% Also, add an extra 10% of your final scaled subject mark	Investigation (20%) Response (40%) Exams (40%)	55% in Yr 10 Ext 1 or at least 80% in Yr 10 Ext 2

<p>Mathematics Specialist</p>	<p>Suitable for very able mathematicians. Not a prerequisite but highly desirable for all Engineering, Mathematics and Physical and Chemical Science degrees. Requires excellent algebra and spatial skills. Excellent choice for able students as will be high scoring ATAR subject. Not affected by scaling at top end and bottom end scaled up.</p>	<p>Science – Medical Imaging Science, Applied Geology, Geophysics, Geographical Information Science, Environmental Science, Aeronautical Technology, Veterinary Science, Physics Computer Systems and Networking, Surveying Mathematics and Statistics, Mathematics, Actuarial Science Education – mathematics Engineering - Civil & Construction, Mining, Chemical, Computer Systems, Mechanical Physics and Nanotechnology</p>	<p>Combinatorics; Vectors in the Plane; Geometry; Trigonometry; Matrices; and Real and Complex Numbers</p>	<p>Yes</p>	<p>Add approx. 0 - 5% Also, add an extra 10% of your final scaled subject mark</p>	<p>Investigation (20%) Response (40%) Exams (40%)</p>	<p>Yr 10 Ext 1 75% or at least 85% in Yr 10 Ext 2</p>
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