2026 QAMT SENIOR MATHS DAY

Time					
08:30	Registration				
09:10	Welcome – E052				
	Commercial (E053)	QCAA (E052)	All (E054)	All (E257)	All (E258)
9:30 – 10:25	Using the TI-Nspire CX II-T in the 2025 Mathematical Methods Paper 2 (Peter Flynn – Texas Instruments)	Making judgments for a PSMT (General/Essential) (QCAA)	Mathematical Modelling with Excel (Phil Trezise - St Edmund's College (Woodend)	Sharing Ideas for External Exam Preparation (Nicholas Lim and Caster Lin – UQ)	Statistical Inferencing (Matthew Overland and Joe Ousby - Full Spectrum Education)
10:30 – 11:25	Using the Casio fx-1AU for Methods and Specialist (Matthew Kleidon – Casio)	Writing a Mathematics examination (General/Essential) (QCAA)	Building AI Visual Simulations for Maths Methods (Harel Urkin - The Gap SHS)	You can teach it! What I learned teaching Specialist Mathematics for the first time (William Roberts - Assisi Catholic College (Brisbane Catholic Education)	Trigonometry in Methods and Specialist (Joe Ousby - Full Spectrum Education)
11:30	Lunch – Ground level				
12:00 – 12:55	Integrating a graphics calculator into the teaching of proof (Peter Flynn – Consultant)	Making judgments for a PSMT (Methods/Specialist) (QCAA)	Cepheid Variables: The Stars that Measure the Universe (Stephen Broderick - St Ursula's College)	All things recruitment (Claire Garner – SchoolHouse Education Recruitment) Running Mathematics Excursions/Incursions (Nathan Haywood - Genesis Christian College)	The Correct Use of Appropriate Mathematical Language (Dr Timothy Lehmann – QUT)
13:00 – 13:55	Using the fx 8200 AU II in Essential and General Mathematics (Steven Gill - Faith Christian School/Casio)	Writing a Mathematics examination (Methods/Specialist) (QCAA)	Superannuation: Bringing Financial Mathematics to Life (Dr Tracey West – Financial Educator)	Money Matters: Making General Maths' Financial Content Impossible to Ignore (Jasmine Zhi - St Joseph's College, Gregory Terrace)	Senior Statistics with Desmos (Ryan Linneman - Linneman.AU)
14:00 – 14:55	Using Desmos to spark enthusiasm and build understanding (Tom Sprenger – QAMT)	Building Thinking Classrooms in General Maths (Suella Lye – QAMT)	Middle years connections to senior Essential/General, and overcoming minimum cut method (Alexander O'Connor -QAMT)		
14:55	Afternoon Tea – Ground level				
15:15	AGM - E052				

Abstracts

Title	Target Area	Abstract
Senior Statistics with Desmos (Ryan Linneman - Linneman.AU)	All	When you think of Desmos, you probably think of graphs, not statistics. This presentation aims to change that (a little bit). I want to help you explore how you can use Desmos to enrich your teaching of statistics in the QCAA senior subjects and enhance your students' learning.
Superannuation: Bringing Financial Mathematics to Life (Dr Tracey West – Financial Educator)	General Mathematics	Superannuation provides a rich context for teaching key General Mathematics concepts, including compound interest, percentages, taxation, and financial modelling. This practical session explores classroom-ready activities drawn from the Marshmallow Money Superannuation book, helping students connect mathematical concepts to real-world decisions about saving, investing, and long-term wealth creation.
The Correct Use of Appropriate Mathematical Language (Dr Timothy Lehmann – QUT)	All	Drawing on extensive research into disciplinary literacy and mathematical modelling, this presentation explores what it means to write like a mathematical modeller. It examines the genre of modelling reports, the language used by mathematicians in published research, and the role of argumentation in communicating and justifying modelling decisions.
Integrating a graphics calculator into the teaching of proof (Peter Flynn – Consultant)	Specialist Mathematics	In this session, I showcase ways of integrating the TI-Nspire CX II-T into the effective teaching and learning of Unit 1 Topic 2 Introduction to Proof and Unit 3 Topic 2 Mathematical Induction.
Using the TI-Nspire CX II-T in the 2025 Mathematical Methods Paper 2 (Peter Flynn – Texas Instrument)	Mathematical Methods	In this session, I showcase efficient ways of using the TI-Nspire CX II-T to answer questions from the 2025 Mathematical Methods Paper 2.
Using the fx 8200 AU II in Essential and General Mathematics (Steven Gill - Faith Christian School/Casio)	Essential Mathematics General Mathematics	Explore practical ways to use the Casio fx 8200 AU II across Senior Essential and General Mathematics. This session will demonstrate efficient approaches to finance, statistics, probability, sequences and equations, while considering how explicit calculator instruction can build student confidence, reduce errors and strengthen mathematical reasoning in varied assessment contexts.
Using the Casio fx-1AU for Methods and Specialist (Matthew Kleidon – Casio)	Specialist Mathematics Mathematical Methods	Learn how to effectively use the Casio fx-1AU through examining the 2025 Specialist Exam. We will explore the transition from the Casio fx-CG50 and show the most meaningful updates and quality of life improvements.
Building AI Visual Simulations for Math Methods (Harel Urkin - The Gap SHS)	Mathematical Methods Specialist Mathematics	In this presentation I will show two case studies of how I used AI coding to create interactive tools that help students visualise and make connections between the mathematical concepts and the physical world. Cases will be directed at Math Methods differentiation problems related to kinematics and optimisation. Participants will then be given time and guidance to build their own visual simulation for a topic of their choice.
Sharing Ideas for External Exam Preparation (Nicholas Lim and Caster Lin – UQ)	All	In the final weeks before External Exams, students are often immersed in practice questions across every subject, while readily available past papers make finding fresh, meaningful revision another challenge. This interactive workshop will share practical approaches to keeping Mathematics revision engaging and invite teachers to exchange

		ideas that worked with their students this year. Joined by former student Caster Lin, the session will also offer insights into revision from a student's perspective.
Running Mathematics Excursions/Incursions (Nathan Haywood - Genesis Christian College)	All	Are you interested in running an excursion or incursion at your school and don't know where to start? I have been running mathematics excursions for grades 10 and 11 for 3 years now. I am willing to share the difficulties and successes that come with running an excursion.
Money Matters: Making General Maths' Financial Content Impossible to Ignore (Jasmine Zhi - St Joseph's College, Gregory Terrace)	General Mathematics	General Maths gets overshadowed by Methods and Specialist, but its financial content is some of the most useful maths we teach, if we ditch the tired textbook contexts for the real decisions students are actually facing. This session works through three real-world examples (Buy Now Pay Later, car finance vs saving up, HECS indexation) mapped to Unit 1 and Unit 4 content, then hands you a template to build your own. Leave with three ready-to-use tasks to give this content the attention it deserves.
Trigonometry in Methods and Specialist (Joe Ousby - Full Spectrum Education)	Mathematical Methods Specialist Mathematics	An inquiry into the teaching of Mathematical Methods Unit Four Trigonometry through the lens of the QCAA EAMGs, Casio, Texis Instruments, Cambridge and Jacaranda. Classroom practice in Years 11 and 12 Methods and Specialist, and Year 10 Advanced will be informed by this workshop.
Statistical Inferencing (Matthew Overland and Joe Ousby - Full Spectrum Education)	Mathematical Methods Specialist Mathematics	The workshop delves into the "why" of the statistical inferencing unit (i.e. sample proportion, sample mean and confidence intervals). Its aim is to give teachers, and in-turn hopefully students, a big picture view of the topic. Hands-on activities will be demonstrated, teaching sequences suggested, and finally common frustrations addressed.
Cepheid Variables: The Stars that Measure the Universe (Stephen Broderick - St Ursula's College)	Mathematical Methods Specialist Mathematics	Henrietta Leavitt's discovery of the Cepheid variable period–luminosity relationship enabled Edwin Hubble to determine the distance to the Andromeda Galaxy, transforming our understanding of the expanding universe. This session demonstrates how smart telescopes and free software allow students to analyse Cepheid light curves. Two classroom activities: calculating the distance to the galaxy M100 and estimating the Hubble constant will be presented. The session will involve using TI-Nspire and will incorporate trigonometric, exponential and logarithmic functions. Images taken by a Seestar S50 and analysed by free astronomy software will also be presented during the session.
Mathematical Modelling with Excel (Phil Trezise - St Edmund's College (Woodend)	Mathematical Methods Specialist Mathematics	Microsoft Excel is commonly used in senior mathematics PSMT's to fit functions to experimental data. However, Excel has only a limited number of options for predefined model types, e.g. polynomial, logarithmic, power and exponential. This workshop will explore the use of Excel's Solver Add-in to create models of virtually any function. Demonstrations will include Newton's Law of Cooling, Gaussian Distributions and Sinusoidal functions. (Uses Excel but otherwise non-commercial).
You can teach it! What I learned teaching Specialist Mathematics for the first time (William Roberts - Assisi Catholic College (Brisbane Catholic Education)	Mathematical Methods Specialist Mathematics	Specialist Mathematics can be just as intimidating for first time teachers as it is for students. At the start of 2025, I began, with some trepidation, my first ever teaching cycle of Specialist Mathematics. As someone who was primarily a Methods Teacher until that point, I was quite intimidated. But through the journey over the last two years, I have learned many lessons that have made me a better Methods teacher!

		This presentation shares key learnings about the interactions between Methods and Specialist, things I would do differently in the future, and a general message of positivity and support for any teacher considering the jump. It is so worth it and not as scary as it sounds!
All things recruitment (Claire Garner – SchoolHouse Education Recruitment)	All	Drop in for a session with education recruiters SchoolHouse for some expert advice on writing a CV, applying for jobs, and preparing for interviews. They will also offer some insider knowledge on the job market here in Queensland
Making judgments for a PSMT and writing a Mathematics examination	Essential/General Methods/Specialist	Get a head start on your assignments and exams for next year with the QCAA. In this session the QCAA subject leads will walk you through marking assignments and writing exams. For this session bring your IAs to get the experts and fellow teachers support, making your roll into 2027 as smooth as possible.
Middle years connections to senior Essential/General, and overcoming minimum cut method (Alexander O'Connor - QAMT)	Essential/General	Building connections between the Australian Curriculum version 9 mathematics content and senior essential and general mathematics. Followed by strategies to help students to work through minimum cut questions.
Building Thinking Classrooms in General Maths (Suella Lye – QAMT)	General Mathematics	This presentation explores how Building Thinking Classrooms can strengthen engagement and mathematical reasoning in General Maths. It shares practical approaches to designing tasks, launching learning, supporting collaboration at boards and consolidating key ideas
Using Desmos to spark enthusiasm and build understanding (Tom Sprenger -QAMT)	Mathematical Methods Specialist Mathematics	Come along to a discussion-based session that explores how Desmos can be used to introduce concepts and procedures to students in Methods and Specialist Mathematics. In this session, I'll share easy-to-access resources and practical approaches to using these to not only engage students, but also build mathematical conversations, encourage thinking, and develop conceptual understanding. Whether you're new to teaching senior mathematics, introducing concepts using technology, or looking to develop your skillset, this workshop aims to get you thinking about your practice and approach towards teaching mathematics.