

Nspiring IB[®] Mathematics

FREE
professional
development
event



Monday 28 November 2022

Novotel Sydney Brighton Beach

Cnr. The Grand Parade and Princess Street, Brighton-Le-Sands, NSW

Connect with local and international presenters as they share resources and experience gleaned from many years teaching IB[®] Mathematics with TI Nspire[™] CX technology.

This free professional development event covers IB[®] Mathematics: **Analysis and Approaches** and **Applications and Interpretation**. You will have the chance to:

- » Select from a wide range of dynamic workshops.
- » Learn new skills to take into the classroom and inspire your students.
- » Experience wireless connectivity and interaction with every student's TI-Nspire[™] CX graphing calculator.
- » Access resources and activities to get students excited about maths.
- » Network with like-minded educators.
- » Receive a professional development Certificate of Attendance.

Catering will be provided. Places are limited; scan the QR code now to register and secure your place.

Event program details on back.

For questions, please contact teacher-support@list.ti.com.



Nspiring IB[®] Mathematics Program

8 – 8:50 a.m. Registration and Arrival / Tea and Coffee / Welcome and Prize Giveaways	
9 – 10:15 a.m. Workshops	
1A	<p>Essential GDC Skills for MAA and MAI</p> <p>Learn the fundamentals of TI-Nspire™ CX II technology for both MAA and MAI, including applications, the latest operating system and software, use of a docking station or TI-Nspire™ CX Navigator™ System, other settings, Press-to-Test mode, and more.</p>
1B	<p>MAA Year 11 Activities: Exploring the 5 Topics With Introductory GDC Activities To Bring Out Teaching Points and Aid Visualisation</p> <p>Explore a classroom activity for each of the five topics using GDC investigations to enhance understanding of concepts. This helps link mathematical representations and approaches. Sample Paper 3 activities will also be shown.</p>
1C	<p>MAI: Number and Algebra</p> <p>Discover ways to utilise the GDC effectively for specific sections of the topic Number and Algebra, including sequences and series and financial applications (and the amortization feature). Learn how to use these features/menus on the calculator.</p>
Morning Tea	
11 a.m. – 12:15 p.m. Workshops	
2A	<p>Flipping Your Classroom To Increase Student Engagement and Interaction</p> <p>Provide increased student interaction, engagement, and real-time feedback and assessment with the TI-Nspire™ CX Navigator™ System. Engage students through a range of different question types, providing the opportunity for every student to respond anonymously, instantly increasing learning and the reliability of responses. You will also explore Press-to-Test mode.</p>
2B	<p>MAA: Paper 2 Preparation</p> <p>This workshop will cover common SL and HL questions using typical examination questions and the latest advice from the IBO about how to prepare for MAA HL Paper 2. Participants will be presented with a sample paper written specifically for this workshop and will be guided on how to solve each problem in an effective way using the GDC.</p>
2C	<p>MAI (SL): Functions and the Graph Screen</p> <p>Designed for teachers who are new to using TI-Nspire™ CX II technology or teaching in IB[®] Diploma programme, this session will explore features of the graph application for MAI SL as well as Lists & Spreadsheet, Data & Statistics, and Calculator applications.</p>
Buffet Lunch	
1 – 2:15 p.m. Workshops	
3A	<p>MAI SL and HL: Further Probability and Statistics</p> <p>Probability and Statistics is a large content area in both MAI SL and HL. Considering the latest advice from the IBO, this session will explore statistical tests required, Pearson's and Spearman's coefficients, confidence intervals, normal distribution, distribution of the sample mean, unbiased estimators, the Poisson distribution, transition matrices and Markov chains.</p>
3B	<p>MAA and MAI: Calculus, Graphing and Modelling</p> <p>This session will target specific differential and integral calculus applications with the help of the GDC. Such applications include Euler's method, drawing tangents, graphing derivatives, determining functions, and more. Applications to kinematics will be covered.</p>
3C	<p>MAI and MAA: Core SL Statistics and Probability</p> <p>The Lists & Spreadsheet and Calculator application pages will be showcased, as well as the Probability menu. Presenters aim to cover dot plots, box plots, histograms, the five number summary, measures of centre and spread, and bivariate data.</p>
Tea and Coffee Break	
2:30 – 3:45 p.m. Workshops	
4A	<p>MAI: Paper 3</p> <p>MAI Paper 3 aims to assess a student's ability to apply their mathematical knowledge with a strong emphasis on interpretation and explanation of the results. In this session, we will use TI-Nspire™ CX II technology to work through some Paper 3 style question parts and discuss how to best prepare students for this paper.</p>
4B	<p>Essential GDC Skills for MAA and MAI (Repeat session)</p> <p>Learn the fundamentals of TI-Nspire™ CX II technology for both MAA and MAI, including applications, the latest operating system and software, use of a docking station or TI-Nspire™ CX Navigator™ System, other settings, Press-to-Test mode, and more.</p>
4C	<p>MAA HL: Paper 3</p> <p>MAA Paper 3 aims to assess a student's ability to apply their mathematical knowledge in situations often requiring exploration leading to generalisation. In this session, we will use TI-Nspire™ CX II technology to work through some Paper 3 style question parts and discuss how to best prepare students for this paper.</p>