



TOMORROW'S INNOVATORS



THE DATTA VIC CONFERENCE | 1 DECEMBER 2023 | NCAT





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VEX 123

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AGES 4+

VEX GO

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AGES 8+

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AGES 11+

VEX EXP

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AGES 14+

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CONFERENCE WELCOME



Welcome to *Tomorrow's Innovators*, DATTA Vic's 2023 annual conference.

Events like this give STEM educators the invaluable opportunity to come together with colleagues to build competencies, confidence and networks. Our program is designed for teachers to develop new skills in the use of traditional and emerging materials and technologies, explore the latest pedagogical innovations and understand curriculum developments.

Tomorrow's Innovators explores how schools can create environments where young individuals are encouraged to think critically, challenge conventions, and pursue their passions. It is only in Design & Technologies and our related VCE subjects that students get to combine creative thinking, skills in making and cutting-edge technologies which prepare them to become future leaders, problem solvers, and innovators.

Whichever conference sessions you attend at this event, we know you will be inspired by the work of fellow educators, academics, and industry professionals, and return to school in 2024 with fresh approaches to teaching this fantastic subject

Zowie Moselen, DATTA Vic President

CONFERENCE KEYNOTE BUILDING A SUSTAINABLE FUTURE BY ROBBIE NEVILLE, REVIVAL PROJECTS



Robbie Neville is the founder of [Revival Projects](#), one of the world's first construction repurposing hubs which won the 2022 *Melbourne Design Week Award* and the 2023 *Visionary Award for Architecture and Design*.

Indigenous design expert Beau de Belle describes Revival as, "the future of circular building practices...a truly sustainable manifestation of the intersection of architecture, building and design".

The hub facilitates the storage and reuse of salvaged building materials that would otherwise become landfill. Robbie and his team are builders, structural engineers, consultants and furniture makers, and provide complete sustainable construction solutions, from start to finish.

Revival have recently launched their Urban Tree Recovery initiative, Australia's only inner-city timber mill and kiln operation. Exclusively handling trees from Melbourne city which are required to be cut-down for reasons such as tree-age, tree health, safety & new development; Revival have unlocked a resource which until now has been handled as waste.

In this inspirational keynote, hear how Robbie is seeking to bring about change by inspiring and enabling designers to adopt simple re-use and recycle policies which can ensure a sustainable future for our city. As Robbie says, "the most sustainable materials in the world are the ones that already exist."

TEACHER OF THE YEAR AWARDS

Each year, DATTA Vic celebrates the hard-working, committed, and creative Design and Technologies teachers who work in schools throughout Victoria. Please help us celebrate and spread the word about the fantastic work that goes on in our classrooms and workshops every day of the school year.

We'll be presenting our winners with their awards at the conference, and we're delighted so many of you will be able to join us to mark this special occasion.

The Foster Adem Award for Leadership in Technologies Education



Michael Slinger, St Leonard's College

The New to Technologies Teaching Award



Letitia Crispin, The Lakes South Morang College

The DATTA Vic Community Service Award



Aaron Dove, Nathalia Secondary College

The Secondary Educator of the Year Award



Brendan Darcy, Kardinia International College

The Secondary Educator of the Year Award

Lisa White, Viewbank College / Warrandyte High School

The Primary Educator of the Year Award

Christine Gilligan,
Glendal Primary School

You can read more about our annual awards, including our past winners, [HERE](#).

ACKNOWLEDGEMENT OF COUNTRY

DATTA Vic acknowledges that our conference is taking place on the traditional lands of the Wurundjeri people of the Kulin Nation, and we pay our respects to their elders past and present. We proudly celebrate the Aboriginal and Torres Strait Islander peoples who were the first innovators of this country, who have managed the land and her resources for millennia. We hope to learn from this knowledge to ensure a sustainable future for our planet.

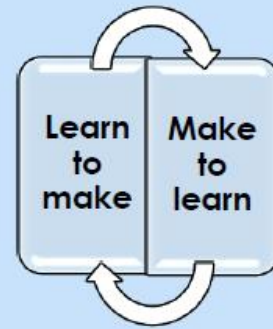
OUR COMMITMENT TO SUSTAINABILITY

We recognise our responsibility. The Design & Technologies learning area seeks to empower young people to develop solutions for a sustainable future. At DATTA Vic we want to play our part by ensuring our service contributes to a respectful use of resources that helps people and planet.

For this conference, we are working with *FIFTEEN TREES*, an Australian social enterprise which helps organisations walk more gently on the planet. As a thank you to all our amazing presenters, we'll be planting a tree in Victoria for each of them. We'll look forward to sharing updates on your trees at the event!

**FIFTEEN
TREE5**

DESIGN & INNOVATE



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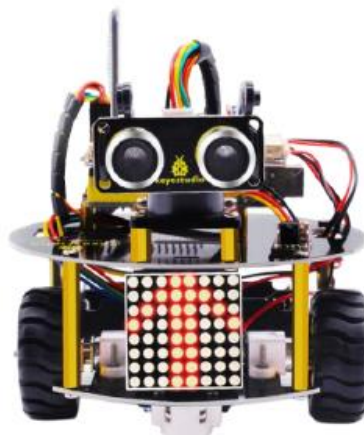
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PROGRAM OUTLINE

Building Guide for Workshops	
T Rooms: Tech Building	B Rooms B-Wing

Subject/Material Key			
Wood/Metal/Plastics	Textiles	Electronics/Sys Eng	General/STEAM

8:00 – 9:00	Industry Show		Trade Exhibition Tech Building						
9:00 – 10:00	Keynote Presentation		NCAT Theatre – Main Building						
10:00 – 10:30	Teacher of the Year Award Ceremony		NCAT Theatre – Main Building						
10:30 – 11:00	Morning Tea		Trade Exhibition – Tech Building						
11:00 – 12:00 Session 1	WORKSHOP 1 Room T20 Advanced 3D Printing – Making Functional Parts by Kae Woei Lim	WORKSHOP 2 Room T2 The Power of the Pen tool by Dijana Jovanovic	WORKSHOP 3 Room T4 Using Command Terms in Design & Technologies by Leanne Compton	WORKSHOP 4 Room T14 Ethical Clothing Australia by Rachael Reilly & Emma Conos	WORKSHOP 5 PART 1 Room T1 Understanding Disabilities & Providing Adjustments for Inclusion in D&T By Andy Ding	WORKSHOP 6 PART 1 Room T6 Memphis Furniture Design Project (Yrs 9-11) by Anthony Bacon	WORKSHOP 7 PART 1 Room T15 Trotec Ruby in Schools by Robert Coates	WORKSHOP 8 PART 1 Room T3 Raspberry Pi for Control Using Python by Anthony Gasson Part 1	WORKSHOP 9 PART 1 B Fashion Room Using Traditional Textiles Techniques in 2023 by Alex Kowal
12:00 – 1:00 Session 2	WORKSHOP 10 Room T20 Designing Sustainable Futures with Forest Learning/DATTA Vic Toolkit for Schools by Joanne Heide & Forest Learning	WORKSHOP 11 Room T2 Real World Design Stimuli by Claire Baillie	WORKSHOP 12 Room T4 Introduction to VCE PD&T 2024-2028 by Leanne Compton	WORKSHOP 13 Room T14 The Stories Behind the Garment by Amy Dallas & Erin Jamieson	WORKSHOP 5 PART 2	WORKSHOP 6 PART 2	WORKSHOP 7 PART 2	WORKSHOP 8 PART 2	WORKSHOP 9 PART 2
1:00 – 2:00	Lunch		Trade Exhibition						
2:00 – 3:00 Session 3	WORKSHOP 14 Room T2 MicoFibre – Designing with Mycelium by Flynn Williams	WORKSHOP 15 Room T1 Designing & Coding with Micro:bits by Sanjin Dedic	WORKSHOP 16 Room T14 Teaching Design & Creative Thinking for Primary by Peter Murphy	WORKSHOP 17 Room T6 Jesmonite Sculpture & Resin & Timber Slab Workshop by Scott Thompson	WORKSHOP 18 PART 1 Room T20 Designing Virtually: Harnessing the best Tech for Design Education by Inspired Education	WORKSHOP 19 PART 1 Room T17 Revive & Repurpose – Upcycled Jewellery by Chantelle Taxis & Renae MacKay	WORKSHOP 20 PART 1 Room T3 Arduino – How to use a range of IO components by Steve De Domenico	WORKSHOP 21 PART 1 Room T4 Integrate Robotics in the Classroom with VEX Continuum and PD+ by Luke Henderson	WORKSHOP 22 PART 1 B Fashion Room Sustainable Textiles in Décor by Fenya Johnson (15)
3:00 – 4:00 Session 4	WORKSHOP 23 Room T1 Digital Tools for Enhanced Feedback by Michael Slinger	WORKSHOP 24 Room T2 Combining Digital & Design in the Technologies Classroom by Stephanie Pavlou & Craig Nicholls	WORKSHOP 25 Room T14 Indigenous STEM by Matt Coffey & Darcy Hammond	WORKSHOP 26 Room T6 Introduction to Acrylic Jewellery by Banyule Nillumbik Tech School	WORKSHOP 18 PART 2	WORKSHOP 19 PART 2	WORKSHOP 20 PART 2	WORKSHOP 21 PART 2	WORKSHOP 22 PART 2

DROP-IN ACTIVITIES RUNNING FROM 8AM - 2PM IN ROOM T9 & 10

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What lids can we collect?

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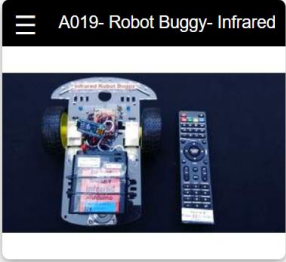
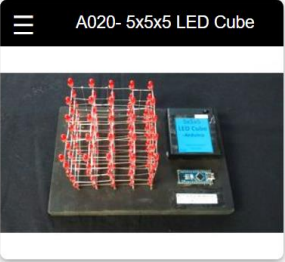
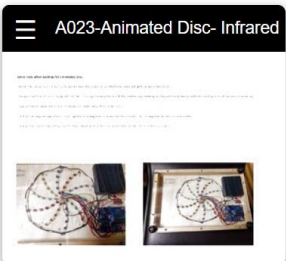


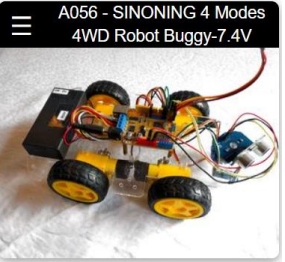
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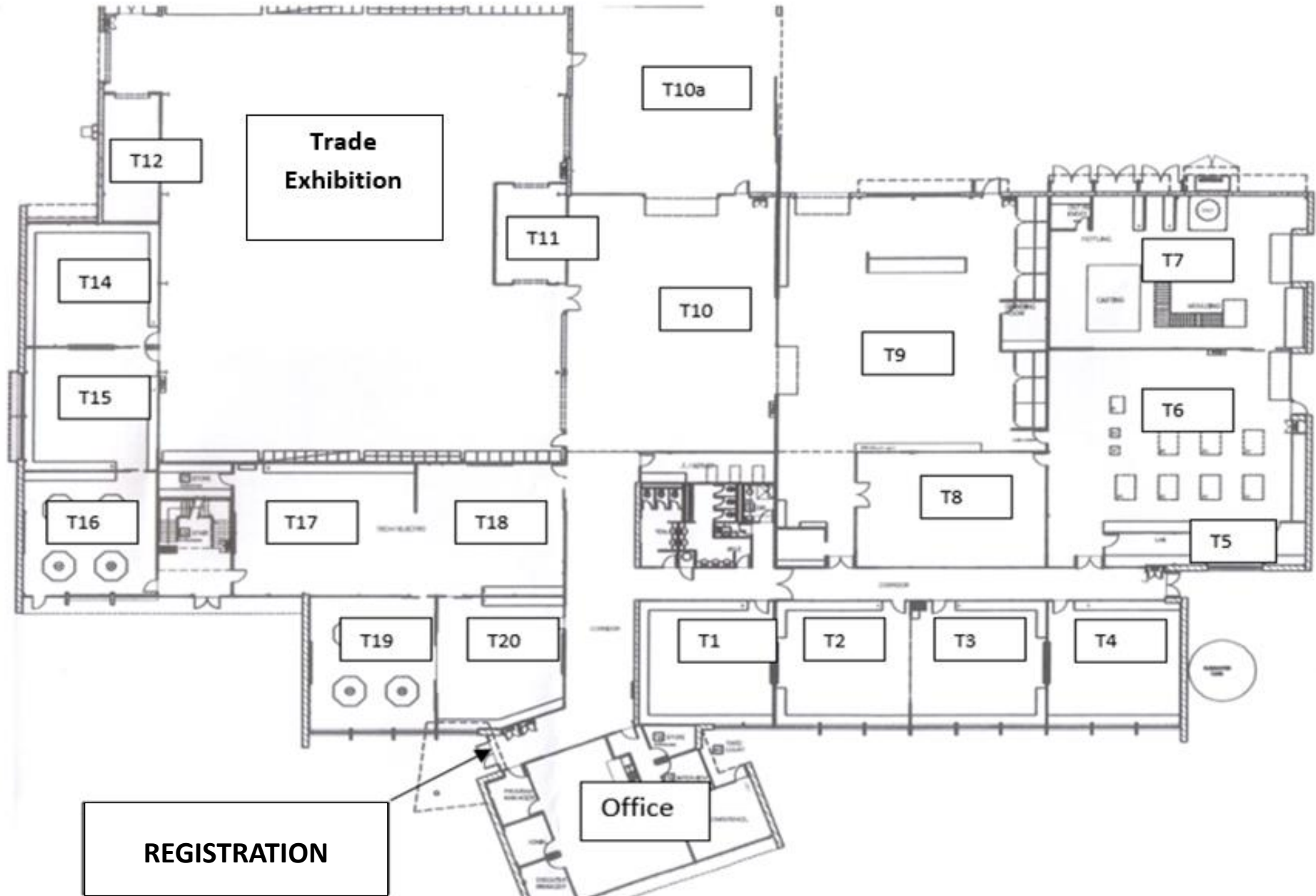
Want to experiment with robotics but don't know where to start? **Pat McMahon** will be here with his amazing range of robot models.

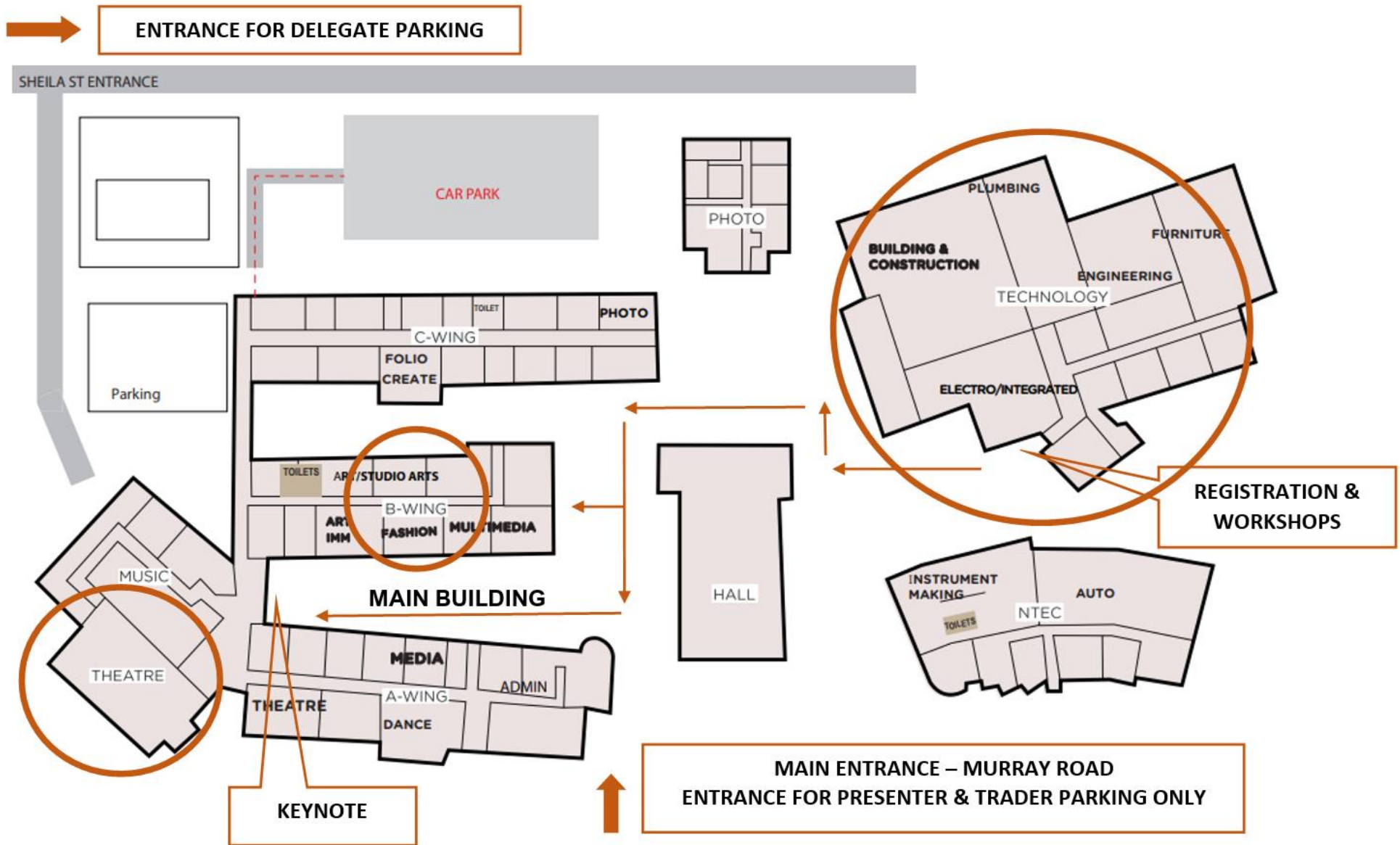
Want to try out your drone-flying skills? Join **Pakronics** and experience their portable drone cage for some hands-on, SAFE fun!



NCAT TECHNOLOGY BUILDING MAP



NCAT SITE PLAN



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Workshop Descriptions – Sessions 1 & 2

Workshop 1 – Advanced 3D Printing – Making Functional Parts by Kae Woei Lim

Session 1 – Room T20

An increasing number of companies are using 3D printing to make functional parts in a wide variety of industries, including aerospace, automotive, medical and consumer goods. This workshop will touch on how some companies have adopted 3D Printing into their workflow. Focusing on how you might enable your students to create more functional and mechanical parts using 3D Printing.

Kae Loie Lim is Creative Director of Imaginables, a long time sales partner of Ultimaker 3D printers who have been providing sales and technical support to schools and universities across Australia. Their key aim is to unlock the potential of 3D printing in the classroom.

Workshop 2 - The Power of the Pen tool by Dijana Jovanovic

Session 1 – Room T2

A demonstration of how to use the Pen Tool properly in Adobe Illustrator and across the Adobe Suite, and why it's one of the most important tools to master. Including: Basic functions of the Pen Tool; Creating lines and shapes with stroke and other special features; Taking a simple sketch and creating vector art from it; Using the Pen Tool in conjunction with other Illustrator tools to create your designs; What the Pen Tool can do in Photoshop & InDesign; Exporting Illustrator files for use in Fusion 360 or for laser Cutting.

Dijana Jovanovic is an Industrial Design student at RMIT University with nearly 14 years professional experience using the Adobe Suite. She studied and worked in both Photography and Graphic Design in Western Australia (WA). She was awarded the 2019 Australian Institute of Professional Photographers Western Australian Student Photographer of the Year. She has been the recipient of a number of awards, including 2nd place in the Nature: Macro category of the 2020 International Photography Awards.

Workshop 3 - Using Command Terms in Design & Technologies by Leanne Compton

Session 1 – Room T4

This session will explore the command terms used in the Victorian Curriculum and VCE study designs to deliver Design and Technologies content. It will also explore the VCAA glossary of command terms and how this document may be used in classrooms by teachers across all F–10 curriculum areas and VCE studies to help students better understand the requirements of command terms in the context of their curriculum areas.

Dr Leanne Compton is the Curriculum Manager, Design and Technologies at the Victorian Curriculum and Assessment Authority. She is responsible for the managing the curriculum in a range of areas from Foundation to Year 12 including Materials and technologies specialisations, Engineering principles and systems, VCE Product Design and Technologies and VCE Systems Engineering

Workshop 4 – The Ethical Textile, Clothing & Footwear Industry in Australia by Rachel Reilly & Emma Conos

Session 1 – Room T14

Learn about the work of Ethical Clothing Australia (ECA), an accreditation body which works collaboratively with local textile, clothing and footwear businesses to ensure they work ethically. The accreditation program maps a business's supply chain from design to dispatch including initial design, pattern making and production and encourages them to view supply chain management as a fundamental part of the business.

Rachel brings a wealth of experience in the not-for-profit space to her role at ECA, with more than 15 years' experience in the sector. She has a strong commitment to human rights, with a focus on labour and women's rights, and has formerly held the position of Executive Director of a Not-for-Profit supporting women who had experienced human trafficking. Rachel holds a Bachelor of International Development and a Master of Human Rights Law. Emma has been passionate about the people who make our clothes since studying a Bachelor of Fashion at Box Hill TAFE. Throughout her career, this led to various positions within labour rights organisations where her work has focused on protecting workers' rights within the garment industry globally and in Australia.

Workshop 5 – Understanding Disabilities and Providing Adjustments for Inclusion in Design & Technologies

Sessions 1 & 2 – Room T1

Students with a disability can develop agency to innovate for a sustainable and just future if they have access to the right support and opportunities. Design & Technologies teachers play an essential role in enabling students with a disability to contribute to solving local and global challenges. This workshop provides a systematic approach for Design & Technologies teachers to support students with a disability. Participants will explore current provision and then identify and plan targeted adjustments to meet their students' diverse needs. They will develop an action plan and find an entry point to create an inclusive environment that will be both efficient and effective.

Andy is an experienced Design & Technologies teacher with a Masters in Inclusive & Special Education from Deakin University. He has a decade of experience supporting students with diverse learning needs in mainstream and specialist school settings. Currently he is the Wellbeing & Inclusion Leader at Gleneagles Secondary College where he also teaches Design & Technologies and VCE Product Design & Technology. He is also a participant in the 2023 Teaching Excellence Program at the Victorian Academy of Teaching & Leadership

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Workshop Descriptions – Sessions 1 & 2 cont'd

Workshop 6 - Memphis Furniture Design Project for Years 9, 10 & 11 by Anthony Bacon Sessions 1 & 2 – Room T6

What is a table? The purpose of this session is to cover an entire unit of work dedicated to challenging students' understanding of an 'everyday item', in this case a small occasional table, through the lens of the Memphis Design Movement. While the Memphis movement had its place in the 1980s, its unique traits in terms of form, colour, texture, and pattern encourage student design skills away from a typical aesthetic whilst developing their abilities in three-dimensional concept sketching and CAD to be presented in the form of a digital folio. All of which are essential in promoting Product Design & Technologies as an advantageous VCE subject and potential career pathway.

Anthony is a qualified Industrial Designer who has over 25 years' experience of teaching Design & Technologies and VCE Product Design & Technology. He is currently Head of Technologies at Mentone Grammar.

Workshop 7 – Trotec Ruby in Schools by Robert Coates Sessions 1 & 2 – Room T15

Trotec Ruby in schools: What's all the fuss about? Ruby is Trotec's latest innovation – a laser software platform made by laser users for laser users including educators and students. During our workshop we will discuss how it's changing the way educators teach the curriculum and how students learn and work with laser technology. **Please bring your own laptop for this session. Note your details will be provided to Trotec to register you for the software.**

Robert works with Trotec, a leading international developer and manufacturer of laser machines with headquarters in Marchtrenk, Austria. The birth of laser technology in their group of companies happened back in 1991, with the then revolutionary idea of using CO2 laser machines to produce text plates, which laid the foundation for Trotec's development history and the digitization of the stamp industry. Today, their machines are used in more than 90 countries around the world.

Workshop 8 – Raspberry Pi for Control Using Python by Anthony Gasson Sessions 1 & 2 – Room T3

This Raspberry Pi learning session is specifically designed for teachers who want to learn how to use GPIO to control external devices and sensors on a Raspberry Pi using Python, and how to create graphical interfaces using Tkinter. By the end of the session, teachers will have the skills and knowledge they need to introduce Raspberry Pi technology to their students and help them create their own interactive projects using GPIO and Python. **Please bring your own laptop for this session.**

Anthony is a Technologies Teacher who is passionate about engaging students with hands-on practical activities. From Automotive to Metalworking, and Robotics to Systems Engineering, he has worked with his classes to improve their confidence in problem-solving and encouraged them to push their skills to the next level. Anthony is currently the Learning Technologies Manager with Banyule Nillumbik Tech School.

Workshop 9 - Using Traditional Textiles Techniques in 2023 by Alex Kowal Sessions 1 & 2 – Fashion Room, B-Wing

This hands-on workshop explores using sustainable materials and standard classroom resources to create a range of surface decoration techniques inspired by traditional embroidery and patchwork processes that can be used by VCE students in their folios.

Alex has over 20 years' experience teaching Product Design in the UK and Australia. Teaching part time has allowed her to create fashion, costume and textiles taking part in runway shows, exhibitions and costuming creative events in the city. Her knowledge of different Textiles techniques has been developed through being a member of the Embroiders Guild, and years spent developing techniques that can work in a classroom.

Workshop 10 – Designing Sustainable Futures with Forest Learning / DATTA Vic Toolkit for Schools by Joanne Heide & Forest Learning Session 2 – Room T20

This workshop showcases new cutting-edge, wood fibre-inspired Design & Technologies resources. Immerse yourself in the world of 'Tree to Timber' virtual reality technologies through ForestVR™. Explore the new D&T teacher toolkit including five new free teaching and learning resources for primary and secondary classrooms. Dive into wood fibre projects like "Sustainable Schools – Going Green in your Canteen" (rayon fabric), "Thinking outside the Cardboard Box" (cardboard seat), "Innovation in wood products – building a more sustainable future" (Little Library or Phone Speaker) - and more! Unpack the themes of design thinking, sustainable forestry, renewable resources, material life cycle analysis, and carbon-positive materials. Delve into biodiversity, innovation, and wood's energy efficiency. Experience the journey from forest to timber via virtual reality headsets at the workshop and gain confidence to integrate these tools seamlessly into your classrooms. ForestVR™ offers immersive 360-degree virtual tours and videos exploring a Australia's productive forests and high-tech wood processing facilities, bridging the gap created by tight timetabling challenges and excursions. You'll leave with unit plans and supplementary resources. Discover more [HERE](#).

Joanne Heide teaches Design & Technologies and visual Arts at Melbourne Ladies College, and is currently the Secretary of DATTA Vic.

Beth Welden is Program Manager of the Forest Learning Education Program, an initiative of Forest and Wood Products Australia. Beth is a trained secondary teacher and has a professional working history in entomology. She has over 18 years professional experience managing state and national industry education programs across K-12 learning areas and has also served as Director on the Primary Industries Education Foundation Australia (PIEFA) board. / Veronica Tyquin is a Curriculum Specialist at Forest Learning, helping shape curriculum resources for current teaching needs. A trained and experienced Forester, Science Teacher, nature educator, and Mum of 2 boys, Veronica brings a diverse experience and perspective. She is passionate about supporting teachers to incorporate hands-on practical learning and sustainability education into the classroom for young people. / Kaz Standish is a passionate primary teacher who previously worked in the forestry industry as a trained forester. She is currently teaching in a rural primary school and working as a Curriculum Specialist with Forest Learning. She has taught in many different education spaces and is particularly committed to sustainability education using various technologies. With over 20 years teaching experience, Kaz is excited to share with teachers and students the practical applications of environmental education.

Workshop Descriptions – Sessions 1 & 2 cont'd

Workshop 11 – Real World Design Stimuli by Claire Baillie **Session 2 – Room T2**

Tips, examples, and discussion on creating student projects from a real-world, stimulus-first perspective. Emphasis on creating real-world design-based projects which allow for a range of student responses and finished products, and how to scaffold these for students at a range of year levels and skill/knowledge points and within the limitations of school resources. Example projects come from Unit 1 & 2 Systems Engineering, Year 7 ICT (Edison Robots), Year 8 STEAM (woodwork and Micro:bit projects), Year 9/10 Robotics (Lego Mindstorm EV3), and Year 9/10 Integrated Systems (Arduino).

Claire's teaching career began in Chemistry and Maths in Upper Yarra Secondary College, but she found a passion for D&T after helping to design and implement a new, semester-long design and programming-based subject at Year 8, called 'STEAM'. She went on to create additional electives at Years 9/10, integrating VR, 3D modelling and printing, laser cutting, and woodwork across these subjects. She provided staff training on the use of 3D printing and laser cutting technologies, and implemented cohesive design-based portfolios across all year levels. Claire now teaches VCE Systems Engineering, Robotics and D&T at Wantirna College, and is the Acting Learning Area Leader for the Visual Arts/Technology Learning Area.

Workshop 12 – Introduction to VCE Product Design & Technologies 2024-2028 by Leanne Compton **Session 2 – Room T4**

This session will provide an overview of the VCE Product Design and Technologies Study Design being implemented in schools in 2024. An overview of the content in each of the units along with the support materials developed will be presented. This session will be similar to content delivered through the VCAA implementation program for VCE Product Design and Technologies. curriculum areas.

See Workshop 3 for Leanne's bio

Workshop 13 – The Stories Behind the Garment by Amy Dallas & Erin Jamieson **Session 2 – Room T14**

The National Trust are looking to open their doors to small school tours of their private collection featuring garments from 1850-1970. Pieces are garments made and worn in Melbourne, Victoria. Through science and close examination of each private piece, the National Trust have been able to identify where individuals lived, how they lived and where they may have migrated from. Since 1956 the National Trust of Australia (Victoria) has been actively conserving and protecting our heritage for future generations to enjoy. They are an independent non-profit charity organisation and the leading operator of house museums and heritage properties in the state. As a community-based member organisation, they are not part of government and work with partners to deliver their mission to "inspire the community to appreciate, conserve and celebrate its diverse natural, cultural, social and Indigenous heritage."

Amy Dallas is currently a Textiles teacher at Killester College. She has had the experience of teaching a range of both juniors, and VCE students, a range of skills and processes required to make a final product. She has worked on the panel of Top Designs and has taken on other various roles for VCAA throughout her time teaching. When at home, Amy enjoys teaching her daughter the basic skills of sewing, helping her to create toys from recycled materials, as well as taking her to fashion exhibitions and runway shows. Her biggest hope is that she will transfer her passion for Textile to both her daughter and students.

Erin Jamieson is a former secondary school teacher who is now the Education Coordinator for the National Trust of Australia (Victoria). Erin is passionate about making object and place-based learning accessible for all, and she endeavours to share what historical objects can tell us about the past through hands-on experiential learning programs.

Workshop Descriptions – Sessions 3 & 4

Workshop 14 – MycoFibre – Designing with Mycelium by Flynn Williams **Session 3 – Room T2**

This workshop explores the process of designing the MycoFibre Shelter, a Textile-Mycelium Shelter for post-fire wildlife protection. Utilising a new composite material consisting of cotton-waste and mycelium, the MycoFibre Shelter aims to address both textile waste, and the threat predators pose to native wildlife after a fire. Textile waste is a serious issue with Australians disposing of a staggering 800 million kg per year, and only a quarter of this getting recovered. The MycoFibre Shelter's composite material represents a new way of up-cycling this waste into a high value product. After a fire, native animals find it difficult to shelter from predators. The MycoFibre shelter addresses this by providing an area of safety wherein wildlife can behave naturally without the threat from these predators.

Flynn is a Product Design Engineering student who has just graduated from Swinburne University of Technology. He is focused on circular design and specialises in using fungal mycelium in his work.

Workshop 15 – Designing & Coding with Micro:Bits by Sanjin Dedic **Session 3 – Room T1**

In this workshop, join an experienced Technologies educator from Grok Academy Sanjon Dedic as he takes you through a fun, practical way to teach and learn coding – both primary & secondary - using Micro:Bits. You'll discover how to get started with simple projects and how to learn alongside your students. Sanjin will demonstrate a range of engaging project ideas ranging from simple to complex. You'll leave with ready to use, free classroom resources to get started with Micro:bits immediately in the classroom. No Prior experience necessary.

Sanjin is a robotics engineer and educator with over 10 years experience teaching Digital Technologies. He co-authored a book on the Micro:bit called *From Go to Whoa with Physical Tech* and developed numerous teacher professional development programs in Python. During the Covid lockdowns, Sanjin expanded his expertise by completing professional cybersecurity qualifications and organising a Cyber Capture the Flag event for the Victorian Coding Challenge.

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Workshop Descriptions – Sessions 3 & 4 cont'd

Workshop 16 – Teaching Design & Creative Thinking for Primary by Peter Murphy Session 3 – Room T14

In 2021, the Program for International Student Assessment (PISA) introduced its Framework for the Assessment of Creative Thinking. This aims to help teachers measure their “students’ capacity to engage productively in the generation, evaluation and improvement of ideas that can result in original and effective solutions, advances in knowledge, and impactful expressions of imagination.” This year, DATTA Vic has delivered a Teaching Design & Creative Thinking Masterclass in partnership with NGV for primary teachers to help them innovate in the delivery of Design & Technologies and celebrate the opportunities this curriculum offers to make their students critical and creative thinkers, skilled at solving authentic problems. Join Peter and the Masterclass participants and experience them working on their final design sprint of the program. You’ll be inspired to take a new approach to D&T and consider how you can facilitate your own students’ creative thinking capabilities.

Peter trained and worked as a designer in Glasgow before moving into design education in Victorian schools. He served for 5 years as state and then national president of Design and Technologies Teachers’ Associations and in between other design education projects he currently trains Technologies and STEM teachers and Industrial Designers at a number of Australian Universities including La Trobe, SCU, ACU and RMIT. He is currently Head of Programs at Banyule Nillumbik Tech School.

Workshop 17 - Jesmonite Sculpture & Resin & Timber Slab Workshop by Scott Thompson Session 3 – Room T6

This workshop offers teachers an introduction to Jesmonite AC100, a water-based eco-resin perfect for the classroom. Participants will observe the basics of a 3D sculpture bring cast and how to use it. They’ll also learn how to do a successful timber slab and epoxy resin pour.

Art Tree Creations has been selling and teaching different epoxy resin techniques and other 3D art forms for over 10 years. They supply many local schools with art supplies, including resins, colour products, 3D modelling clays and Jesmonite acrylic polymer casting systems.

Workshop 18 – Designing Virtually: Harnessing the Best Tech for Design Education (VR/AR/AI) by Rashan Senanyake Sessions 3 & 4 – Room T20

This workshop delves into the transformative power of emerging technologies for design education. Discover the latest tools, trends and real-world examples that are reshaping design & tech practices, skills and industry applications. This session is literally immersive – you will explore AI, AR, VR (Demo Designing) and cutting-edge software applications, with a hands-on focus on designing virtually with takeaways for your classroom.

Rashan is the founder and CEO of Australia’s leading professional development in 21st century education institute - Inspired Education Australia. He also runs Inspired Design Australia, servicing and helping other entrepreneurs and small businesses with ‘Design for Business’. Rashan is a published author, an international public speaker who has delivered keynotes and lectures to universities. He has been featured in a variety of podcast shows and design journals in Australia. Rashan’s podcast ‘Inspiring Design with Rashan Senanayake’ is now a top 200 education podcast in the world as well as known as the no. 1 design education resource for schools around Australia.

Workshop 19 – Revive & Repurpose – Upcycled Jewellery by Chantelle Taxis & Renae MacKay Sessions 3 & 4 – Room T17

This workshop looks at ways to upcycle everyday objects into unique jewellery pieces. Discover affordable and fun techniques that can be seamlessly integrated into lesson plans, igniting creativity and sustainability in the classroom. Take away some great resources and make some examples to wear in your next class!

Chantelle and Renae are both experienced educators with a passion for art and design education. They bonded over a shared love of inspiring students to combine art, jewellery and fashion together – a dynamic duo! Chantelle teaches at St Helena Secondary College and Renae, at Assumption College.

Workshop 20 – Arduino – How to Use a Range of IO Components by Steve De Domenico Sessions 3 & 4 – Room T3

Participants will learn the basics of Arduino by using a number of input/output components to interact with in an interesting way. These include measuring temperature, humidity and lux to name a few. In doing so, this session will teach the basics of coding and syntax, the use of necessary libraries and using the Arduino IDE software to program. Testing, modifying and correcting errors will be discussed along the way. **Please bring your own laptop for this session.**

Steve has taught Mathematics, Systems Engineering, Programming and Robotics within secondary schools in Australia, the UK and Europe for the past 25 years. One of his hobbies is tinkering with Arduino, which has demonstrated how numerous curriculum areas within schools can be complemented with the use of microcontrollers such as Arduino.

Workshop 21 – Integrate Robotics in the Classroom with VEX Continuum and PD+ by Luke Henderson Sessions 3 & 4 – Room T4

This workshop will introduce teachers to VEX robotics, demonstrate several case studies of how VEX can be used in the STEAM classroom and introduce PD+ as an expansive lesson library and support network for teachers. **Please bring your own laptop for this session.**

Luke Henderson of Innovation First is an active advocate of the maker movement, STEM and PBL. He has a wealth of experience in STEM across the globe. He has worked for tech companies and as a freelance maker educator. He has frequented many maker faires, run his own makerspace and has designed maker curriculum covering a wide range of topics from 3D modelling, soldering and computer programming. He has even provided workshops to major tech companies such as Intel and Huawei.



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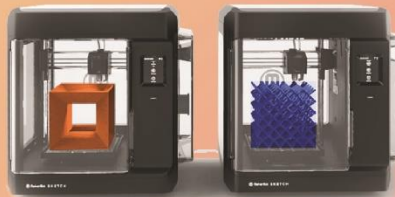


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Workshop Descriptions – Sessions 3 & 4 cont'd

Workshop 22 – Sustainable Textiles in Décor by Fenja Johnson Sessions 3 & 4 – Fashion Room, B-Wing

Creating desirable products using sustainable practises is the greatest challenge in fashion and textiles. This workshop will cover the importance of sustainable practices in the textiles classroom and participants will have 2 hours to work towards completing a quilted wall hanging of their own design, repurposing fabrics from previous projects. It will include an overview on how to structure a unit on sustainable wall hangings, a sample design brief for students as well as a kit of necessary fabrics and materials to complete and assemble their quilted wall hanging.

Fenja is a Textiles and English teacher at Carey Baptist Grammar. She is a passionate sewist, pattern tester for indie designers and all-round fashion enthusiast. She views sewing as a form of rebellion and is dedicated to encouraging everyone to craft a me-made wardrobe of their dreams. You can catch up with her sewing adventures on Instagram @sew.heart.soul.

Workshop 23 – Digital Tools for Enhanced Feedback by Michael Slinger Session 4 – Room T1

Feedback is central to learning. Explore a range of digital tools that can increase the likelihood of students understanding your appraisal of their work more clearly, and which can help them complete feedback cycles by using your appraisal to improve their work. Provoke thinking about your own practice and what improvements you could make that suit your specific educational setting. **Please bring your own laptop for this session.**

Michael is an experienced Design & Technologies teacher with a passion for empowering students through innovative learning experiences. With over 13 years' teaching experience, he has dedicated his career to fostering creativity, critical thinking and problem-solving skills among his students. Prior to transitioning into education, he worked as an industrial designer, gaining valuable industry insights that he now brings into the classroom. As an enthusiastic advocate for Design & Technologies, he aims to inspire and encourage as many young minds as possible to explore this dynamic field and discover their own potential.

Workshop 24 – Combining Digital & Design in the Technologies Classroom by Stephanie Pavlou & Craig Nicholls Session 4 – Room T2

In this workshop, Craig & Stephanie will share their experience with developing and implementing a new discipline of Technologies, which includes both digital and design technologies in the same classroom. Participants will develop an insight into the opportunities that are available in their own classes through the development of a unit of work which includes by Design and Digital Technologies. **Please bring your own laptop for this session.**

Stephanie is the Head of Technologies at Melbourne Girls Grammar. She teaches across both Digital and Design Technologies, in addition to VCD and Art. Prior to entering the teaching profession in 2022, she worked in the product design and fashion industry.

Stephanie is very passionate about providing students with opportunities to flourish holistically in their education as the next generation of individuals who are critical and creative thinkers.

Craig is the Director of Digital Learning at Melbourne Girls Grammar and has over 25 years' experience in the state and independent sectors. He's an active member of the education community, serving on the Committee of Management for Digital Learning & Teaching Victoria and as the Victorian representative on the Australian Council for Computers in Education. He is also an ISTE Community Leader, an Adobe Education Leader and a Microsoft Innovative Education Expert.

Workshop 25 – Indigenous STEM by Matt Coffey & Darcy Hammond Session 4 – Room T14

Science Gallery Melbourne has created a suite of three Indigenous STEM workshops in collaboration with knowledge holders and facilitators. The workshops focus on the subject areas of Sustainability, Sky Knowledges and Fire Practice. Join Matt and be inspired by how you can appropriately celebrate First Nations history and culture within your Design & Technologies classes.

Matt is the STEAM Learning & Outreach Officer at Science Gallery Melbourne and has been involved with the Indigenous STEM programs since their inception in 2020. Exploring the collision of art and science and playing a vital role in shifting our understanding of science, art and innovation, Science Gallery Melbourne is part of the acclaimed Global Science Gallery Network pioneered by Trinity College Dublin. Science Gallery Melbourne builds on the success of the Network, bringing a southern hemisphere flair to its innovative models of engaging 15–25-year-olds with science.

Darcy is an undergraduate student at the University of Melbourne studying Geography and International Relations with a Diploma in Russian Languages. Darcy is a proud Gunaikurnai woman who has worked as both a facilitator and developer on Science Gallery programs. Darcy is passionate about STEAM and hopes to study and work in the health space in the future.

Workshop 26 – Introduction to Acrylic Jewellery by Banyule Nillumbik Tech School Session 4 – Room T6

Join some of the fantastic Banyule Nillumbik Tech School team for this hands-on introduction to designing and making acrylic jewellery. You'll learn about working in a new material, discover designing in CAD and producing on the laser cutter. This is a great project for engaging with a more diverse cohort of students, particularly those with special education needs.

The Banyule Nillumbik Tech School is part of the Victorian government Tech Schools initiative to move school education into the future. They develop and run specialist STEAM programs and activities that help prepare local students for the challenges of the future and the changing nature of work. Their programs are designed in partnership with community, industry and schools in response to key challenges facing the local community.

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Conference Information

Venue

Tomorrow's Innovators is being held at the Northern College of the Arts & Technology (NCAT), 62 Murray Road, Preston. Phone 03 9478 1333, visit www.ncat.edu.au.

NCAT is a senior secondary government school created for students who are looking to thrive in a supportive environment of like-minded students in order to complete a Year 10, VCE or VCE Vocational Major and go on to tertiary courses, apprenticeships, or employment into all areas of the visual and performing arts, design, multimedia, photography or the trades and technologies.

Parking & Transport

Parking is only available for presenters and trade exhibitors in the main car park off the Murray Road entrance. Delegate parking is behind the venue at their Sheila Street entrance. However, please note there is also ample free parking available in the streets around the venue.

Information on public transport options from your home location is available at www.ptv.vic.gov.au/journey.

Presenters

A huge thank you goes to all of our keynote and workshop presenters for giving up their time and for sharing their skills and knowledge. We are so grateful for your contribution.

Trade Exhibitors

All trade exhibitors are located in the Technology Building at NCAT where the majority of our workshops are running. This is also where our coffee cart will be operating and morning tea and lunch will be served. During the morning, they will be offering hands-on demonstrations of their latest products and services. A *Conference Trader Listing* is included in this program for further details of our sponsors, trade exhibitors and advertisers.

Enquiries

Contact Laura at pl@datta.vic.edu.au if you have any questions about the DATTA Vic 2023 conference. For all invoicing enquiries, contact Emma on admin@datta.vic.edu.au.

Requirements

All our sessions have limited numbers – please book early to ensure your first choice. Also, please note that some sessions require delegates to bring their own materials, laptops, or tablets. This is indicated in the workshop descriptions, and you'll be sent any requirements the week prior to the event.

Pricing

DATTA Vic Member: \$290
Non-Member: \$390
Student/CRT: \$90

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DATTA Vic will refund the full fee, less an administration cost, if you cancel 7 or more working days before a workshop, seminar, or conference and 50% of the fee if you cancel 1 to 7 days prior to the event. If you register but do not attend without cancelling prior to an event you will be charged the full fee unless a medical certificate is provided.

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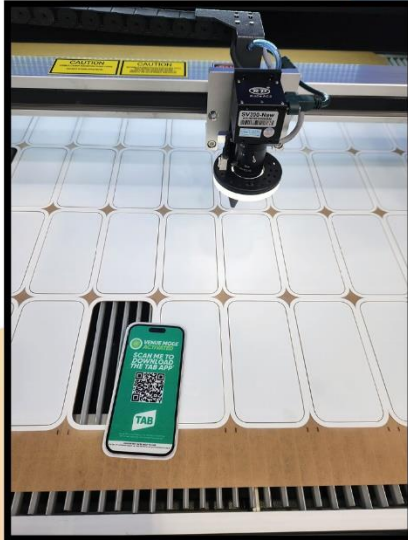
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