design for people

DATTA Vic
Conference Program

Friday 15\textsuperscript{th} & Saturday 16\textsuperscript{th} May
Harvester Technical College
Sunshine

www.datta.vic.edu.au
pl@datta.vic.edu.au
(03) 9349 5809
Excitech SHM-0609 CNC Router
- 900mm x 600mm Table working area with T slot clamping system.
- Industrial hand held NK105 machine controller.
- Simple USB file transfer system.
- Tool length measuring device included.
- Quiet air cooled 1.5kw high variable speed high frequency spindle motor.
- Spindle suitable for 1/4” - 1/2” router cutters.
- Maximum positioning speed of 6m/min and cutting speed up to 5m/min.
- Heavy stable steel frame to ensure an accurate flat table work surface.
- Precision imported PMI ball screws for X, Y and Z axis movements.
- Precision imported PMI linear bearing guides used on X, Y and Z axis movements.
- All rotating ball screws guarded by safety covers to ensure operator safety.
- Dust extraction guard around spindle with 100mm (4”) connection point for efficient dust collection.
- Type 3 / Router 8 CAD software included.
- Compact but strong machine weighing 180kg.

$10,350.00 plus gst
Plus delivery and installation costs

INTRODUCING EXCITECH ‘COMPACT RANGE’ OF CNC ROUTERS

Excitech SHG-1212 CNC Router
- 1200mm x 1200mm Table working area with T slot clamping system.
- Industrial hand held NK105 machine controller.
- Simple USB file transfer system.
- Tool length measuring device included.
- Quiet air cooled 3.5kw high variable speed high frequency spindle motor.
- Spindle suitable for 1/4” - 1/2” router cutters.
- Maximum positioning speed of 6m/min and cutting speed up to 5m/min.
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- All rotating ball screws guarded by safety covers to ensure operator safety.
- Dust extraction guard around spindle with 100mm (4”) connection point for efficient dust collection.
- Type 3 / Router 8 CAD software included.
- Compact but strong machine weighing 550kg.

Model SHG-1212 $13,4700.00 plus gst
Model SHG-1224 $19,980.00 plus gst
Plus delivery and installation costs
Welcome

DATTA Vic welcomes you to our annual Conference, Design for People, and to Harvester Technical College. Design for People will focus on technology as key to the development of solutions to global problems, and explore ethical and people-centred design. The program will also provide an exciting opportunity for delegates to explore best practice in new technologies, new approaches to teaching and learning and to prepare for the New Technologies Curriculum through a range of practical and seminar-style workshops.

We are also delighted to be running our live student competition, So You Think You Can Design, now in its fourth year. Students from different schools will compete in a range of design challenges, from creating mood boards to full scale prototypes. These tasks will be completed throughout the Friday and Saturday, and you’ll be able to watch the participants as they work. SYTYCD highlights new techniques and possibilities within Product Design and Technology, as well providing both participants and spectators with entertainment and inspiration! The future is looking bright for SYTYCD, as there are plans both to develop an engineering off-shoot, and also to launch it as a national competition. Plus we’re delighted to welcome Swinburne University of Technology and Picokit on board as project sponsors.

Conference Schedule Friday & Saturday

8.00am – 9.00am    Registration, Trade Exhibition, Tea & Coffee
9.00am – 9.30am    Welcome from the DATTA Vic President
9.30am – 10.30am   Keynote
10.30am – 11.00am  Morning Tea & Trade Exhibition
11.00am – 1.00pm   Workshops/Presentations
1.00pm – 2.00pm    Lunch & Trade Exhibition
2.00pm – 4.00pm    Workshops
4.00pm            Close
**Workshop Overview Friday 15th May 2015**

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# Workshop Overview Saturday 16th May 2015

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**Workshop Guide:**
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- PD&T - WMP
- Systems Engineering
- All/General

**Workshop Examples:**
- Workshop 38: Wool 4 School by Ashley Hollis & Katrina Wheaton-Pennial
- Workshop 39a: Design Thinking by Bridgette Engeler-Newbury, Swinburne University
Our Keynote Presenters

Friday 15th May
Ian Dryden
Industrial Design Team Leader
The City of Melbourne

Designing for Melbourne

Since completing his studies, Ian Dryden has successfully worked with an assignment as Industrial Designer in the Urban Design Unit at the City of Melbourne.

His task since 1987 has been to program, design, implement and market street furniture and temporary facilities for the City. Ian's major task has been the design and coordination of the street furniture, temporary fixtures, kiosks, toilets, decoration, lighting systems and pedestrian information signage for the City's master plan. Ian's work has received both popular and professional recognition. He is a contributing member of the City's Urban Design team, who has won a number of AIA, AILA, IES awards and an International Industrial Design award for the cities projects.

Sponsored by Wool4School,
Australian Wool Innovation Limited, The Woolmark Company

EDUCATIONAL RESOURCES
FOR YOUR CLASSROOM

Supported by Australian Wool Innovation Ltd.

LEARN ABOUT WOOL
Take your students on the journey from the farm to the world of high fashion with Australian Wool Innovation’s Learn About Wool kit.

Whether investigating wool as a material for a fashion project, exploring the rich history of one of Australia's oldest and most economically important agricultural industries, or investigating the way modern wool producers negotiate the complex balance of sustainable food and fibre production, the Learn About Wool kit contains plenty of material to engage and excite students across all ages and learning areas.

For teachers or schools to request their free kit or for more information email teacherskit@wool.com or visit www.learnaboutwool.com

WOOL4SCHOOL™ NATIONAL DESIGN COMPETITION
Wool4School™ is a real life fashion design experience tailored for the classroom, with big rewards up for grabs for both students and teachers.

Open to years 7, 8, 9, 10 and 11 design and technology, textile designs, home economics and visual art students. Wool4School™ sets the challenge to design an original outfit made from one of the world's most innovative and natural fibres - Australian Merino wool.

There are endless resources that have been written by professionals to provide you with an easy-to-teach project in line with learning aims for Year 7 to 11.

If you don't have time to introduce the Wool4School™ lesson plans into your classroom, encourage your students to get involved by working in their own time. They can still download the resource packs for free from this website to find out about what to do and how to do it.

For further information please email wool4school@wool.com or visit www.wool4school.com
Our Keynote Presenters

Saturday 16\textsuperscript{th} May
Alisha Ryans-Taylor
K-12 Impact and Leadership Co-ordinator
Engineers Without Borders

Designing for Social Good - Engineers Creating Positive Change

Alisha is the K-12 Impact and Leadership Coordinator for Engineers Without Borders Australia. Starting with EWB just over 3 years ago, Alisha coordinates EWB’s activities engaging school-aged youth across Australia, and collaborates with other outreach, education, and curriculum support organisations such as Google, ACARA, Teach For Australia, and industry to create opportunities that inspire young people to pursue further studies and careers in STEM and computer science.

Coming from a gender and development, and disaster response background, Alisha is passionate about getting more diverse representation in technical fields, particularly girls and Aboriginal and Torres Strait Islander youth. It's this diversity that fosters innovation, and ensures that the tools and designs of tomorrow enable a broader range of participants in the fields of problem solving, and game changing.

Sponsored by the Department of Engineering,
La Trobe University
Workshops

Workshops 1a & b
Exploring Fabric Printing Using Gelli Plates by Tania Di Berardino, Zart Art
Fri, 11am – 1pm
Subject Area: Textiles
Suitable for: All

Tania Di Berardino has a Bachelor of Fine Art with a major in textiles. She is employed with Zart Art as a textile and art consultant to teachers and students across Melbourne, Country Victoria and the ACT. She is also a practicing artist and a member of the paper makers of Victoria.

Workshop 2
DesignTechStudies.org - IKEA Project by Jarrod Carter
Fri, 11am – 12 noon
Subject Area: Wood, Metal & Plastics
Suitable for: Secondary
DesignTechStudies.org was created with the aim of producing accessible, relevant Design Tech projects in a space where teachers can collaborate and share ideas. The first project created is an IKEA-inspired project based on the principles of Scandinavian design and modern assembly techniques. All student exercises are based on the Aus VELS curriculum and placed online to improve student access. Both this project and DesignTechStudies.org are a work in progress. Jarrod will present both concepts with the aim of gathering support and sharing ideas on how best to use this tool to improve student outcomes.

Jarrod Carter is Head of Design at Mercy Regional College in Camperdown. His background is in Industrial Design and he has worked in the industry for over 10 years, including 6 years with Cochlear, the creators of the first bionic ear. He is a member of the DATTA Vic committee.

Workshop 3
Build Engineers of the Future with Ev3 Robotics by Libby Moore, Moore Educational
Fri, 11am – 12 noon
Subject Area: Systems Engineering
Suitable for: Primary/Secondary
LEGO Mindstorms Education Ev3 engages students in robotics and STEM. Explore the integrated teaching resource Design Engineering Projects that implements the design engineering process with lessons designed to develop 21st Century creative thinking, problem solving, teamwork and communication skills. This hands-on workshop requires no experience.

Libby Moore was a teacher for 15 years before taking on the position of Curriculum consultant. In 1992 she joined LEGO Education, and in 1998 established Moore Educational as a national distributor of LEGO Education. Her passion for the benefits of 'hands on minds on' learning led to the opening of LEGO Education Learning Centres and continues through the delivery of LEGO Education Learning Programs throughout Australia.

Workshops 4a & b
Cut, Fold & Roll Your Way Through Sheet Metal by Jeremy Hill
Fri, 11am – 1pm
Subject Area: Wood, Metal & Plastics
Suitable for: Secondary
This workshop covers the operation of a 3 in 1 Sheet working machine – A great, low cost addition to the workshop. This tool is suitable for cutting through sheet material to a thickness of 1mm and can easily be used in conjunction with polypropylene.

Jeremy is a qualified Industrial Designer; he studied at RMIT and at the School of Art in Glasgow Scotland. Both before and after his studies he worked closely with Daryl O’Brien (Carpenter) as a trade’s assistant on buildings such as the UQ Ipswich Activity Centre, designed by Wilson architects. It is the combination of passion for thoughtful design and hands on experience that Jeremy finds most rewarding sharing in his classrooms with students. Jeremy is a member of the DATTA Vic committee.
Workshops 5a & b
Quick & Easy Website Construction for Folios by Wayne Young
- Fri, 11am – 1pm
- Subject Area: ALL
- Suitable for: VCE/VET/VCAL

With no experience in making websites, by the end of this workshop you will have completed a fully functional and professional website for your classes and be able to teach your students to make websites to document their production process.

Wayne Young has been a member the Victorian and Australian International Model Solar Vehicle Committees for over a decade and has conducted hands on workshops with students all over the state. He currently teaches technology and science at Billanook College in Melbourne.

Workshops 6a & b
Hands-on Metalcraft by Greg Cowie, Chevington Tools
- Fri, 11am – 1pm, Chevington Tools Trade Exhibition Stall, Main Hall
- Subject Area: Wood, Metal & Plastics
- Suitable for: ALL

Get hands on instruction on the use of the genuine Metalcraft™ range of tools from Chevington Tools P/L. Metalcraft™ tools from England are safe and easy to use tools suitable for use by most age groups. All work is hand powered and requires no heating of the metal or welding for some projects. As part of this workshop, make a project or two to take home as a teaching model for use at your school.

Chevington Tools have been supplying Metalcraft™ tools from England since 1997. These safe and easy to use tools can produce worthwhile and classy projects without the need to heat metal as was common in the past. These tools are now used in over 1600 Australian schools from primary level through to adult for a wide range of metals and D&T composite projects. Easy to set up and can be used in any school even if you don’t have a metalwork room. Chevington Tools also supply a wide range of popular accessories to finish off projects and stock some rare and hard to find items.

Workshops 7a & b
VCE Product Drawing & Rendering by Foster Adem
- Fri, 11am – 1pm
- Subject Area: Wood, Metal & Plastics
- Suitable for: VCE/VET/VCAL

Participants will apply practical hand drawing and rendering approaches that are used in teaching VCE PD&T Unit 1 Design Folio Skills.

Foster Adem is Head of Faculty at Trinity Grammar School in Kew. He teaches Design & Technology from Year 7-10 and VCE Product Design & Technology.

Workshops 8a & b
Arduino Primer by Dr. Robert Ross, La Trobe University
- Fri, 11am – 1pm
- Subject Area: Systems Engineering
- Suitable for: VCE/VET/VCAL

This workshop will equip attendees with the basics to be able to program Arduinos and interface them to sensors and other electronics. Participants will also be given access to a suite of online course material with video seminars, course notes and laboratory exercises.

Robert has a PhD in field robotics and is a lecturer in Robotics, Mechatronics and Electronics at La Trobe University. Robert has been actively involved in schools engagement and has designed very successful programs including LaserTag and Whiskerbot which has been used by thousands of students across Victoria.
Workshops

Workshop 9
Simple Picaxe Robot by Rod Smith & Peter Martin
Fri, 12noon – 1pm
Subject Area: Systems Engineering
Suitable for: Secondary/VCE/VET/VCAL

This workshop will detail the design and construction of a simple Picaxe controlled robot that moves marbles. Participants will be given resources to successfully implement the construction of both the Mechanical and Electro-Technological elements in their own school that maps to both Units 1 and 2 VCE Systems Engineering.

After a successful career in the Electrotechnology Industry, Rod has been teaching Electrotechnology and Engineering since 1997 at both TAFE and High School. He currently works Girton Grammar School in Bendigo teaching VCE Systems Engineering.

Workshop 10
3D Printing for a Beginner by Stephanie Porrino
Fri, 12 noon – 1pm
Subject Area: Wood, Metal & Plastics
Suitable for: ALL

Come and get basic information, projects and resources to take back to school to start 3D printing. Some example of units covered are cookie cutters, USB cases, chess set, etc.

Stephanie Porrino is a DATTA Vic committee member and Head of Technology at Wyndham Central College in Werribee. She has been teaching wood, plastic, design and electronics for the past 7 years and loves creating interesting tasks for students to run with. She likes the challenge of incorporating new and exciting technology in her classroom.

Workshop 11
Socrative – Collecting Student Data the Easy Way! by Pat McMahon
Fri, 2pm – 3pm
Subject Area: ALL
Suitable for: ALL

Participants will see how simple and quick it is to use the free Socrative program to create a professionally-set class quiz or test with your own images, and have it self-correct at the push of a button. The program can be used on any device, including iPads & phones.

Pat has had over 3000 students build a Microcontroller and has run DATTA Vic workshops for over 450 teachers. He has been honoured to receive various International, National and State Innovation and Teacher of the Year awards.

Workshops 12a & b
Lego Serious Play by Bridgette Engeler-Newbury, Swinburne University of Technology
Fri, 2pm – 4pm
Subject Area: ALL
Suitable for: ALL

In this hands-on workshop learn more about how LEGO® SERIOUS PLAY® can improve group problem solving. The LEGO® SERIOUS PLAY® Method is a facilitated meeting, communication and problem-solving process. Each participant builds his or her own 3D LEGO® model in response to the facilitator’s questions using specially selected elements. These 3D models serve as a basis for group discussion, knowledge sharing, problem solving and decision making.

Course coordinator at the Swinburne University School of Design, and practicing academic, Bridgette Engeler-Newbury teaches in the areas of design thinking and design management, cross-cultural design strategy and strategic foresight. Prior to joining Swinburne, Bridgette worked on myriad design projects, from new product and brand launches to corporate rebrand initiatives and innovation projects in Australia, Asia, North America, New Zealand and the Middle East. Bridgette is also a certified LEGO® SERIOUS PLAY® facilitator.
Workshops

Workshops 13a & b
Getting Ready to Flip Your Classroom by Suzanne Arnott
Fri, 2pm – 4pm
Subject Area: ALL
Suitable for: ALL

Flipping your classroom requires you to create learning modules students can review at home prior to coming to class, where you will put them into practice. This workshop will introduce you to some simple programs available on the Edustar software. Participants should bring images and ideas to develop into a video module, including voice, which you can then share.

Suzanne works at Sandringham College, and relishes the ability to creatively use iPads and other hand-held technology in the practical technology classroom. She has been teaching Textiles, Photography and a range of Multimedia subjects for over 20 years, and loves seeing her students getting hooked on learning.

Workshops 14a & b
How to Use Various Feet & Accessories on a Sewing Machine by Cathy Sofarnos, Bernina Australia
Fri, 2pm – 4pm
Subject Area: Textiles
Suitable for: Secondary/VCE/VET/VCAL

There are many different feet and accessories that are available for your sewing machine that can assist various sewing techniques. This class will be a demonstration of how to use numerous feet and accessories and their application possibilities. Notes will be provided and samples of various techniques will be available to view.

Cathy Sofarnos is a sales and training consultant for Bernina Australia. Her role is wide and varied and includes product training, education and support for the Bernina dealers in Victoria, S.A and Tasmania. Bernina have enjoyed a long and established relationship with the schools and education institutions around Australia and this conference gives her the opportunity to inform teachers of the latest product information and sewing techniques that can very easily be brought into the classroom environment.

Workshops 15a & b
Shifting Gear: Racing Renders by Grace Di Muzio, National Gallery of Victoria
Fri, 2pm – 4pm
Subject Area: Wood, Metal & Plastics
Suitable for: ALL

Rendering techniques are a powerful way of visualising design ideas. This workshop allows teachers to experiment with a range of rendering techniques and materials inspired by the classic vehicles in the Shifting Gear: Design, innovation and the Australian car exhibition.

Grace Di Muzio completed a Bachelor of Arts and Crafts at Melbourne State College in 1986. She has had extensive experience teaching art & design in a number of Melbourne Secondary schools, before joining the National Gallery of Victoria as an Educator in 2007. Since joining the NGV, Grace has developed her expertise in the area of Product Design & Technology, regularly working with secondary and tertiary groups. Grace particularly enjoys challenging and educating young people by developing an understanding of the Visual Arts and Design thinking.

Workshop 16a & b
Scrolling Through a Metal-Based Program by Mike Lampard & Franca Petrolo
Fri, 2pm – 4pm
Subject Area: Wood, Metal & Plastics
Suitable for: Secondary

This workshop will explore how a metal based program, based on the use of Metalcraft equipment, was developed at Overnewton College. It will include the background to the course and how skills were developed.

Mike Lampard is the Head of Visual Arts at the Keilor Campus of Overnewton College. A long-time teacher at the school, he has worked alongside colleagues at different campuses to develop a coherent and engaging curriculum. Franca Petrolo is an experienced practitioner who teaches Design and Technology and Art at the Taylors Lakes campus and Canowindra Centre.
Workshops

Workshop 17
Top Designs by Miranda Picton Warlow, VCAA

Fri, 2pm – 3pm
Subject Area: ALL
Suitable for: VCE/VET/VCAL

This workshop will offer participants the lowdown on the inner workings of Top Designs. You'll be given an insight into the VCAA's selection process - from application through to exhibition.

Miranda Picton-Warlow is the Student Events Manager at the Victorian Curriculum & Assessment Authority. She oversees the annual VCE Season of Excellence, which showcases outstanding design, visual and performing arts from Victorian students. Top Designs is a highlight of this five-month arts festival.

Workshops 18a & b
Building a Model Solar Boat for Competition by Wayne Young

Fri, 2pm – 4pm
Subject Area: Systems Engineering
Suitable for: ALL

This workshop enables teachers to help their students to construct or improve model solar powered boats. These boats could be used at school or entered into the model Solar Vehicle Challenge at Scienceworks. Construction involves the use of available materials and the boats are simple and cheap to make Students learn about friction, propeller choice, aerodynamics, simple circuits and solar electricity. You will work in groups to construct a model solar boat in the session.

Wayne Young has been a member the Victorian and Australian International Model Solar Vehicle Committees for over a decade and has conducted hands on workshops with students all over the state. He currently teaches technology and science at Billanook College in Melbourne.

Workshop 19
Harvester Technical College Tour & CNC Equipment Demonstration by Aaron Powter

Fri, 3pm – 4pm
Subject Area: ALL/Systems Engineering
Suitable for: ALL

Join Aaron Powter for a tour of the fantastic facilities at Harvester technical College, and see a demonstration of some of the high-end CNC equipment on offer, including the Haas CND Lathe & Mill amd Epilog CNC laser.

Aaron Powter is a curriculum writer and engineering faculty leader at Harvester Technical College, Sunshine. He predominantly teaches in both VCE Systems Engineering and VET Engineering programs. Aaron has been involved in secondary education for the past 10 years and has worked for both Education Queensland and DEECD in Victoria. He is a VCAA assessor for Systems Engineering and sessional lecturer. Aaron is a qualified engineer with an extensive background in mechanics and engineering integrated systems. Aaron is an enthusiastic teacher who holds a passion for radio control aircraft, robotics and mechatronics.

Workshop 20
Wool4School Design Competition by Ashley Hollis & Katrina Wheaton-Penniall

Fri, 3pm – 4pm
Subject Area: Textiles
Suitable for: Secondary

Wool4School is a real life fashion design experience tailored for the classroom. Open to Years 7-11 students, Wool4School provides teachers with lesson plans and resources, in line with the national curriculum. In this session, Australian Wool Innovation/The Woolmark Company will provide valuable knowledge of Merino wool and tips on how to implement the lesson plans within your classroom.

Workshops

Workshops 21a & b
Who Puts the Jewel in Jewellery? by Nellie Peoples

Sat, 11am – 1pm
Subject Area: Wood, Metal, Plastics
Suitable for: ALL

Award-winning gold and silversmith Nellie Peoples will run a presentation on her practice, and also a fun, hands-on jewellery-making workshop focusing on design thinking and the connections made between objects (jewellery) and people.

ACT-based artist and jeweller Nellie Peoples has just been recognised in 15 Women to Watch 2015 by HerCanberra. She also received the inaugural Design + Craft Outstanding Single Practitioner at the DESIGNCanberra Festival. She was a finalist in the Spirit of Youth Award 365 Craft & Object Design, and the Australian Craft Awards. The Design Institute of Australia awarded her their Australian Professional Encouragement Award, and Craft ACT gave her the National Exhibition Award.

Workshop 22
STEM & DT by Finbarr Drinan

Sat, 11am – 12 noon
Subject Area: Wood, Metal & Plastics
Suitable for: Secondary, VCE/VET/VCAL

STEM is a learning approach based on the integrated curriculum of Science, Technology, Engineering and Maths. During 2015 ACARA are trialling STEM in a limited number of schools around Australia with a view to expanding the take up in 2016 and beyond. This session will give Design & Technology teachers an opportunity to learn about STEM and specifically how to integrate Design & Technology into the STEM curriculum in your school.

Finbarr Drinan studied Industrial Design in Ireland before moving to Australia and working for over 20 years as a commercial artist. Finbarr is Technology Coordinator at Northcote High School and teaches D&T, VISCOM and Art.

Workshops 23a & b
Technical Drawing for Textiles by Phillipa Loton

Sat, 11am – 1pm
Subject Area: Textiles
Suitable for: Secondary, VCE/VET/VCAL

This hands-on workshop presents an overview of the common misconceptions and mistakes about working drawings. It will offer participants a range of helpful hints & tips.

Phillipa Loton studied Fashion Design at RMIT. She went on to study to become a Secondary Teacher. Phillipa taught for several years at RMIT, and now works as an Art & Textiles teacher. She is also a member of the DATTA Vic board.

Workshops 24a & b
Robogals – Diversity in Engineering by Leroy Lim, Robogals

Sat, 11am – 1pm
Subject Area: Systems Engineering
Suitable for: ALL

This workshop will introduce participants to the world of Robogals, and their work engaging girls in the fields of Engineering and Technology. You can also try some fun, hands-on robotics activities, and learn what Robogals can offer your school.

Robogals is a student-run organisation that aims to engage schoolgirls in engineering topics from a young age, with the long-term goal of increasing female enrolment in engineering, science and technology courses at universities. Our primary activity is having university student volunteers (both female and male) visit girls’ primary schools to run LEGO robotics workshops and mentor teams in LEGO robotics competitions.

Workshops 25 a & b
Basic, Hands-On Skills in Wood by Jill Livett

Sat, 11am – 1pm
Subject Area: Wood, Metal, Plastics
Suitable for: Secondary

This workshop is for teachers new to the Technology learning area or with limited skills in wood. It will provide teachers with basic foundation skills, giving them confidence and hands-on experience while creating simple products. You’ll explore materials, simple joins, basic tools and processes and safety.

For Jill’s bio, see workshops 34a & b
Workshops

Workshops 26a & b
An Introduction to Solidworks by Katie Harris
Sat, 11am – 1pm
Subject Area: Wood, Metal, Plastics
Suitable for: ALL

Thinking about updating your CAD program? Think Solidworks! This workshop will run through the basic functions and features of the program, and focus on developing new skills for participants of all experience levels. See student examples and get to know the benefits of using an industry-standard CAD software in your school.

Katie Harris is an RMIT Industrial Design graduate turned Product Design & Technology Teacher. She worked as Head of Faculty (Technology) at Aitken College for 3 years where she developed a strong CAD program for years 9 and 10. She is currently studying Mathematics and Statistics at La Trobe University to add to her teaching arsenal, and is a member of the DATTA Vic committee.

Workshop 27
Style That’s Sew Easy – and Sew Cheap! by Leeyong Soo, Style Wilderness
Sat, 12noon – 1pm
Subject Area: Textiles
Suitable for: ALL

This session will show participants how to upcycle and rework garments and textiles to get more wear out of clothes they already have, or make "new" items from old garments and Op shop finds. Adaptable for all age groups.

A DIY-er since childhood and an avid fan of op shops, Leeyong Soo has written craft and sewing columns for Japanese Vogue and Peppermint magazine as well as her blog, Style Wilderness (stylewilderness.com). She has conducted and assisted at upcycling workshops for festivals run by Knox, Monash and Moreland councils and is currently writing a book on easy, sustainable ways to rework a wardrobe. In her spare time she is establishing a fair trade jewellery brand, which can be viewed at wildernessbazaar.com

Workshop 28
The use of Power Anchor and Bottle Rockets projects in Design & Technology & Systems Engineering by Merrick Russell, Designability & Dean Hannah, Excite and Educate
Sat, 12 noon – 1pm
Subject Area: Systems Engineering & Wood, Metal & Plastics
Suitable for: Secondary

The Power Anchor Workshop looks at the range of projects that can be made using it –particularly within STEM. Participants will build and construct their own balsawood plane and test it for aerodynamics, lift and speed characteristics. See Youtube example here: http://www.designability.com.au/classroom-projects/skylap. The Bottle Rocket workshop will involve design /making and flying a bottle rocket and focus on STEM concepts like speed, centre of mass/pressure and aerodynamics. See Youtube example here: https://www.youtube.com/watch?v=PDIFbPBE6Ts&list=TLa50cql_oLtY.

Participants need to bring two 1.25 litre bottles to make their bottle rockets.

Merrick trained as an Industrial Designer, has worked as a motor yacht designer and then a teacher of Design and Technology in Sydney. He has been actively involved in teacher training through Association of independent Schools (NSW), Teacher Training Australia and Sydney University. He co-founded Designability as resource for teachers of Design and Technology, which has become a well-known and respected supporter of the subject. He currently works for Designability developing teaching programmes, classroom videos and providing training and resources. Recent projects include design and development of the PowerAnchor.

Dean Hannah has been a Design & Technology/ Engineering teacher for 23 years. In 2007 Dean won 2 awards for “The Excellence in the Integration of Information and Communication Technologies Award”. He has presented at the annual ITEA conference in 2009 in Louville Kentucky. In 2010 he invented a bottle rocket launcher exclusively for use in high schools to teach STEM concepts. As a result of its success, he started a company called Excite and Educate, who for the last 5 years have been selling innovative technology to high schools.
Workshops

Workshop 29

From Little Things Big Things Grow! by Georgene Bridgeman, Akorn Educational Services

Sat, 2pm – 3pm
Subject Area: Systems Engineering & Woog, Metal & Plastics
Suitable for: ALL

Akorn Educational Services has been linking schools, business communities and other organisations to develop learning programs since its inception in 2001. In this workshop Akorn’s CEO, Georgene Bridgeman, will outline some of their highly successful programs. Their key focus areas are leadership, teamwork, developing communication and problem-solving skills and project management techniques which are then applied to a project brief given to the students by the community partner. See examples of student work and find out about the tangible benefits of Akorn programs for students, businesses and communities when they form partnerships.

Georgene is the CEO of Akorn Educational Services. She has been working with the Educational community in excess of 20 years – the last 15 through Akorn. Although, she is well known for developing and implementing strategic and tactical plans in a wide range of educational and business environments with demonstrated improved student learning outcomes, her primary passion is using STEM and community based partnerships to make learning fun, exciting, challenging and rewarding for students and the broader community.

Workshops 30a & b

Exquisite Threads: English Embroidery 1600-1900s by Marg Stephens, National Gallery of Victoria

Sat, 2pm – 4pm
Subject Area: Textiles
Suitable for: ALL

Exquisite Threads: English Embroidery 1600-1900s runs at NGV from April 2 to July 12, and presents significant works from the collection including an exceptional 17th c raised needlework picture, an 18th c silk apron with botanical imagery, and a range of samplers from 1600 to 1900. Participants will explore the works on display, and then take part in a practical workshop, which focuses on simple embroidery techniques using a range of non-traditional materials and ideas.

Marg Stephens currently works at the NGV and is an experienced arts educator across the primary, secondary and tertiary sectors. Marg is particularly interested in symbolism and identity in clothing and textiles and has collected many pieces during her travels across Africa, India, Indonesia and China. Prior to the NGV Marg worked for the Asia Education Foundation conducting the My Place Asia Australia project, creating partnerships between schools and exploring ideas of identity through the visual arts and literacy.

Workshops 31a & b

Build an Infrared Picaxe Microcontroller by Pat McMahon

Sat, 2pm – 4pm
Subject Area: Systems Engineering
Suitable for: ALL

Participants will build and take home their own Infrared Picaxe 14M2 Microcontroller. They will learn how simple it is to program it to run a variety of popular student model examples, like the LED Light Tower, 3x3x3 LED Cube, 28 Tunes, Light & Sound Extension Board, etc.

Pat has had over 3000 students build a Microcontroller and has run DATTA Vic workshops for over 450 teachers. He has been honoured to receive various International, National and State Innovation and teacher of the Year awards.

Workshops 32 a & b

Build a Nesting Box by Ken Aitken

Sat, 2pm – 4pm
Subject Area: Wood, Metal, Plastics
Suitable for: ALL

This workshop will show you how to design and construct a nesting box for wild birds. It is ideal for Years 7, 8 & 9 projects.

Ken Aitken is currently working at Yea High School, and is a general member of the DATTA Vic committee.
Workshops

Workshops 33a & b
Basic Pneumatics by Paul Barton

Sat, 2pm – 4pm
Subject Area: Systems Engineering
Suitable for: VCE/VET/VCAL

This workshop will cover the basics of pneumatics within the Systems Engineering curriculum. Paul will cover the components used, basic designs, calculations, previous exam questions as well as a hands on component and simulation software.

Paul has been teaching Systems Engineering for 9 Years and before that was a Fitter and Turner in industry for 23 years. He has worked as a Hydraulic Service Technician, ran the hydraulics, pneumatics and lubrication systems at Smorgon Steel's rolling mill and worked in the pressurization (pneumatics) section for Ansett Australia.

Workshops 34a & b
Basic, Hands-On Skills in Plastics by Jill Livett

Sat, 2pm – 4pm
Subject Area: Wood, Metal, Plastics
Suitable for: Secondary

This workshop is for teachers new to the Technology learning area or with limited skills in plastics. It will provide teachers with basic foundation skills, giving them confidence and hands-on experience while creating simple products. You’ll explore materials, simple joins, basic tools and processes and safety.

Jill has been around DATTA Vic and D&T teaching for a long time and still finds it exciting. She is currently the president of DATTA Vic. She teaches in the Wood, Plastics and Textiles areas, and has presented and written support texts for VCE Product Design and Development study design.

Workshop 35a & b
How to Use Various Feet & Accessories on a Sewing Machine by Cathy Sofarnos, Bernina Australia

Sat, 2pm – 4pm
Subject Area: Textiles
Suitable for: Secondary/VCE/VET/VCAL

Repeat of Workshops 14a & b

Workshops 36a & b
Cut, Fold & Roll Your Way Through Sheet Metal by Jeremy Hill

Sat, 2pm – 4pm
Subject Area: Wood, Metal & Plastics
Suitable for: Secondary

Repeat of Workshops 4a & b

Workshop 37
So You Think You Can Design by Peter Murphy

Sat, 3pm – 4pm
Subject Area: Wood, Metal & Plastics
Suitable for: Secondary

Catch the SYTYCD finals running live throughout the conference and then come along to the workshop to get the lowdown on how to get your school involved next year. Discover how the competition developed, and get hints and tips for your students to help them complete the sketching and CAD challenges during the Week of Design 2016.

Peter Murphy worked as a product designer in the UK. Following a period working in further education, he taught English in Berlin for 3 years. He then moved to Melbourne in 2009 to pursue a Graduate Diploma in Secondary Education at Victoria University. Peter worked as Technology Co-ordinator at Simonds Catholic College where he first created SYTYCD. Peter now teaches PD&T at Northcote High School. He was part of the PD&T VCE review and has co-written teacher support materials.
Workshops

Workshop 38
Wool4School Design Competition by Ashley Hollis, Wool4School & Katrina Wheaton-Penniall
- Sat, 2pm 4pm
- Subject Area: Textiles
- Suitable for: Secondary
- Repeat of Workshop 20

Workshop 39a & b
Design Thinking by Bridgette Engeler-Newbury, Swinburne University of Technology
- Sat, 2pm 4pm
- Subject Area: ALL
- Suitable for: Secondary

Swinburne’s School of Design is recognised as one of Australia’s leading educational institutions for design. Join Bridgette Engeler-Newbury in this workshop taking an inclusive, collaborative and cross-curricular approach to design thinking. Work on the creative process that helps your students design meaningful solutions for real world problems.

Course coordinator at the Swinburne University School of Design, and practicing academic, Bridgette Engeler-Newbury teaches in the areas of design thinking and design management, cross-cultural design strategy and strategic foresight. Prior to joining Swinburne, Bridgette worked on myriad design projects, from new product and brand launches to corporate rebrand initiatives and innovation projects in Australia, Asia, North America, New Zealand and the Middle East. Bridgette is also a certified LEGO® SERIOUS PLAY® facilitator.

“Blink and you’ve missed it”

If you are looking for a great Design and Technology project – consider CO2 Dragsters

The purpose of the CO2 DRAGSTER competition is to provide a means for students to demonstrate their ability using Design Make Appraise (DMA) principles to draw, design and then build a dragster within a set of specifications. Dragsters are then tested on a 20-meter track for speed to determine the fastest dragster.

For further information regarding the Co2 Dragsters, Supplies and Competition Rules

Please contact: Velocity Technology School Supplies

Email info@vtss.com.au
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- product design engineering
- robotics and mechatronics engineering.

swinburne.edu.au/study
Conference Information

Register for the Conference at www.datta.vic.edu.au

Workshop Sessions
Workshop sessions have limited numbers – please book early to ensure your first choice. Also, please make sure you note which workshops require you to bring your own materials, laptops or tablets.

Venue Details
The Design for People Conference is being held at Harvester Technical College, 76 Suffolk Road, Sunshine North VIC 3020. Tel 03 8311 5555 http://www.harvestercollege.vic.edu.au/

Public Transport
Travel from Flinders Street Station platforms 4/5 on the Sunbury or Watergardens lines to Sunshine Station. From bus bay 5, take the 408 bus towards St. Albans, and alight at Sussex St/Northumberland Rd.

Parking
There is limited parking available on-site at Harvester Technical College, and plenty of free parking in the surrounding streets.

Catering
The conference will be catered by James Ray & Co The Caterers, with continuous tea & coffee facilities. Those with special dietary requirements should complete the appropriate section on the registration form.

Pricing
Registration includes: keynote address, conference sessions, conference satchel, coffee & tea and lunch.

Fees for 1 day:
DATTA Vic Member: $220
Non-Member: $319*
Associate Member: $180
Associate Non-Member: $240*
Student: $33*

Fees for both days:
DATTA Vic Member: $299
Non-Member: $399*
Associate Member: $250
Associate Non-Member: $310*
Student: $66*

*includes DATTA Vic membership

Cancellations
DATTA Vic will refund the full fee less an administration cost if you cancel 4 or more working days before a workshop, seminar or conference and 50% of the fee if you cancel 1 to 3 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.

Disclaimer
DATTA Vic will not accept liability for damage or loss of any nature sustained by participants, suppliers, agents, contractors, consultants or their accompanying persons, to their personal property as a result of the DATTA Vic Design for People conference, Trade Show or any related events. Program is correct at the time of printing and subject to change without notice. Please accept our apologies for any inconvenience caused. Notice of cancelled sessions will be circulated as soon as practical to registered delegates.
About Harvester Technical College

Harvester Technical College offers an innovative approach to vocational and technical education in senior secondary schools—the program is more focused, more effective, and more relevant to the world in which young Australians will shape their futures.

This innovative pathway to a trade career has been made possible by key partnerships across the industry, government and education sectors.

They work closely with Australian Industry and the leading tertiary institutes of vocational and technical education.

Their partners are proud to be involved in such an exciting initiative, and have provided expertise and direction. The students can only benefit from their commitment to providing better learning and career opportunities. All recognise the opportunity provided by the Harvester Technical College to establish specialised vocational education as an important and desirable option for senior secondary students.

DATTA Vic wish to thank Mark Natoli, Aaron Powter and all the staff at Harvester for their help in planning and running the Design for People conference.

Accommodation

Sunshine Motor Inn are offering our delegates a 10% discount on any accommodation booked for the conference. Just mention DATTA Vic at the time of booking. Tel: 03 9363 1899. Email: reception@sunshinemotorinn.com.au http://www.sunshinemotorinn.com.au/

Trade Exhibitors

All trade exhibitors are located in the main hall, along with the catering, allowing delegates to pursue a range of resources, materials and equipment at their leisure throughout the day.

A flier listing all trade exhibitors and sponsors, including contact details will be included in your conference satchel.

Sponsorship

DATTA Vic would like to acknowledge the following sponsors of Design for People and thank them for their support:

- Swinburne University of Technology
- Picokit
- La Trobe University
- Wool4School
- Gilking School Supplies
- Bernina Australia

Presenters

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

Contact

For all conference program enquiries, contact Laura on 03 9349 5809 or pl@datta.vic.edu.au.

For all invoicing enquiries, contact Davone on 03 9349 1538 or admin@datta.vic.edu.au.
Notes

Thanks to our satchel Sponsors:

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