

Creative entrepreneurs are about to enter a new age of 'thinking their ideas into reality', thanks to the launch of 21st century 'FabLab' workshops in design and manufacture headed by a British professor at Girne's new Arucad University.
ANNE CANALP went along to find out more.

Arucad owner Erbil Arkin, Oya Silbery, Prof Antony Eddison and Tobia Reposi



Entering a new age



Youngsters at a Spanish FabLab watch their dreams materialise in a 3D printer

DESIGN ideas and equipment went on show at the soft launch of FabLabCyprus — an initiative by the Arkin University of Creative Arts and Design (Arucad), which promises July workshops for artists, schools, businesses and colleges.

Professor Antony Eddison, dean of Arucad's Faculty of Design, showed off his Scottish heritage by donning a kilt for the launch of the new university's 'FabLab' — a digital personal fabrication laboratory open to all — and spoke passionately about "helping the genuinely creative 30 per cent of the population

to realise their dreams".

He told a launch audience at Girne's Art Rooms: "By the summer we will have both virtual and augmented reality systems in place and 3D printers and scanners, large and small."

A flatbed laser cutter is also part of a massive investment in new-age technology by Arucad owner Erbil Arkin which includes CNC (computer numerical controlled) six-axis equipment capable of producing life-size sculptures.

Ceramics also enter the 21st century as computer modelling paired with 3D printing allows geometric manipulation in multi-dimensional cyberspace without physical constraints to produce "other world" forms. Objects may also be captured with 3D scanning to produce replicas or moulds.

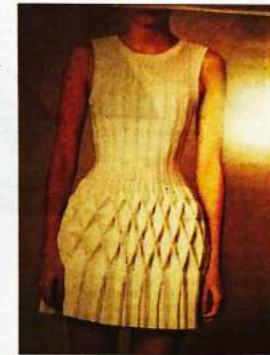
The new dean explained: "This means access to the digital revolution in arts and crafts using equipment which has long been in use by the

aerospace and automobile industries.

"We will offer inductions, open days, workshops, training and family days. All you need to bring is enthusiasm and an open mind. You could be a complete novice or an experienced engineer and one of the great strengths of FabLab is that people from different disciplines can exchange ideas and combine their talents. Think of it as your own personal factory in the heart of Girne."

He added that FabLab had fuelled a major movement for project-based learning in schools, giving pupils the chance to design and make their ideas in real life. He said this could eliminate fear of failure and make both failures and successes a "learning curve to deeper understanding and creativity".

Prof Eddison said: "Arucad is opening a fashion department as FabLab technologies are already widely used in the fashion industry (and have eliminated what was a high level of waste — 20 per cent of textiles. Now we have experimental new textiles and creative designs are limitless.



"Imagine a handbag with interior lights, suits with augmented reality glasses, individualised shoes, hats or jewellery or online sharing of designs which can be replicated but adjusted for different parts of the world.

"We have a massive wood-working facility and can make 'traditional' designs (combining both traditional and computer-based techniques), or even affordable flat-pack temporary furniture made from triple cardboard. The future promises flexible, transformable and interactive furniture with the ultimate combination of local production and global reach.

"The applications for architecture are also limitless. Think of instant print shops and imagine a future with big CNC milling machines, computer-guided routers that can slice steel or etch glass, customised 3D-printed and cut building products or 3D-printed liquid concrete on site."

Inquiries and registration for a regular e-newsletter may be made to the www.fablabcyprus.com website which will be up and running by the end of May, with workshops due to start in July.

Above, the new technology offers limitless scope for fashion and textile designers. Left, statues were produced with the Ultimaker 3D printer for the show.



HOW FABLABS BEGAN

DIGITAL fabrication labs, known as FabLabs, were developed in America at the prestigious Massachusetts Institute of Technology (MIT) by physicist and mathematician Professor Neil Gershenfeld, director of the MIT Center for Bits and Atoms.

He originated the growing global network of over 1,000 field FabLabs to allow democratic access to these new digital tools and skills after using them in groundbreaking projects from molecular quantum computers to the creation of virtuoso-level musical instruments.

Digitally designed and produced jewellery and shoes

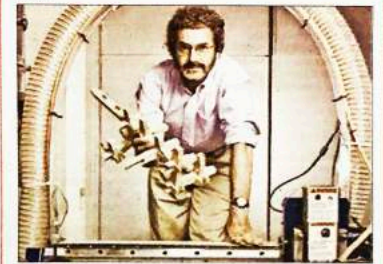
Professor Gershenfeld said: "The real opportunity is to harness the inventive power of the world to local design and produce solutions to local problems. If anyone can make anything anywhere, it fundamentally changes the meaning of business."

The network gives modern-day "Leonardos" the chance to create their own prototype designs by joining the open and creative FabLab community of fabricators, artists, scientists, engineers, educators, students, amateurs and professionals of all ages.

FabLabs are also linked to the Fab Academy, an associated programme for research and education in the principles and practices of digital fabrication.

Professor Gershenfeld's lab technology has been used in settings as diverse as the New York Museum of Modern Art, rural Indian villages, the White House, the World Economic Forum, inner-city communities, car safety systems and Las Vegas shows.

He is the author of numerous technical publications, patents and books including *Fab* and *When Things Start to Think*.



Professor Neil Gershenfeld designing reality



Ultimaker 3D printer, one of the new digital technology tools which went on show at the launch. Right, a 3D printed machine part on show at the Art Rooms exhibition.

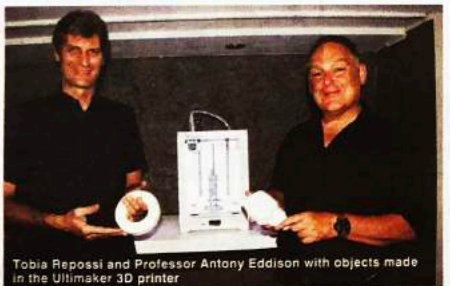
THE MEN HEADING GIRNE'S FABLAB

PROFESSOR Antony Eddison is a newcomer to North Cyprus who aims to develop new ways of unlocking creativity and innovation in education, business and the wider community.

The Arucad head of design and dean of the faculty starts FabLabCyprus with over 20 years of teaching experience and senior management in higher education across the UK and in countries from China and Mauritius to Africa, Australia and Singapore.

A Principal Fellow of the UK's Higher Education Academy and Associate of the Quality Assurance Agency for Higher Education UK, he is also a business and education consultant.

Also involved in the new venture is Arucad Research and Enterprise Hub director and acclaimed Italian architect Tobia Reposi, a former lecturer at the Polytechnic University of Milan's Faculty of Design and the European Institute of Design. He lives between Europe and Asia and is also a successful product designer for major groups and leading China-based companies. He founded a product and interior design company in Shenzhen in 2015.



Tobia Reposi and Professor Antony Eddison with objects made in the Ultimaker 3D printer



A contemporary homage to Michelangelo's unfinished series "Prigioni"

