The Maritime High School based at Le Fevre High School is an initiative of the South Australian government and combines secondary school studies that have a specific focus on high level maths and science and technical Vocational Education and Training (VET) within a maritime context.

The Maritime High School now combines secondary school studies that have a specific focus on maritime studies for the Western Adelaide regional schools. In addition to the maritime vocational courses, a number of maritime scientific studies courses have been developed providing opportunities for students to study ship design, electronics, radar, GPS and navigation technologies. This provides a training pathway towards achieving a nationally recognised vocational accreditation and the South Australian Certificate of Education (SACE) at the same time.

Le Fevre Teacher spends time at Levett Engineering

In June 2015, Chris Chisakos, a VET engineering teacher from Le Fevre High School, had the opportunity to spend four days at Levett Engineering.

Levett, based at Elizabeth, uses machining technology manufacturing and specialises in high security components for the aviation; defence and maritime industries. During the placement Chris operated various three and five-axis CNC machines. The materials involved were titanium and high-tensile aluminium. Chris checked all the components specifications to the drawings supplied by the customer.

“I found it very interesting that Levett wards young people who have basic skills and experience in manual machining processes. For example, basic measuring skills, use of engine lathes, drilling and milling machines,” said Chris.

Chris also spent time in metrology where he observed Levett’s high precision measuring using CNC measuring machines. He became familiar with their quality control and quality assurance processes and appreciated the preventative maintenance program for their equipment and machinery.

He used this opportunity to talk with both tradepeople and management to see what they believed were the most valuable skills and knowledge for students doing work placement and apprentice selection.

“This is why I find the VET engineering trade program so valuable for students at Le Fevre because it gives them the opportunity to showcase their skills in the workplace during the Structured Workplace Learning program,” Chris said.

“The added knowledge about the new capabilities of CNC machines has been invaluable for my teaching and something that I will take back to the classroom.

“I would like to take this opportunity to thank Levett Engineering for providing this great opportunity and allowing me to be part of the team in their machine shop.”

Where are they now?

Mikayla Thompson is currently a first year student at the University of Tasmania, Newnham Campus, more commonly known as The Australian Maritime College (AMC).

Mikayla completed Year 12 at Le Fevre High School (LHHS) in 2014 and is now studying a Bachelor of General Studies (Engineering Pathway) bridging into Bachelor of Engineering – Naval Architecture (Honours).

“I transferred to LHHS in Year 12 because of the unique partnership that the school has with AMC which gave me opportunities to visit the college for a three day study trip. I also had constant contact with AMC, which helped me to complete the LHHS Maritime Science subject. That gave me solid background knowledge and has been very beneficial this year,” said Mikayla.

“First year at uni has been interesting so far – I have completed both units from UTAS and AMC and I’ve had to complete a course in basic mathematics and basic science. I have also had the pleasure of doing Engineering Design and Communication. For that subject, in 13 weeks, in groups of six, we created an autonomous surface vehicle (ASV) 0.5m long, 0.25m wide and 0.25m high. It had to be fully waterproof, buoyant and fully autonomous, which means robot controlled. The machines had to detect a course and make all decisions without human help.”

I also studied a unit on engineering-based mathematics, a physics unit and another unit called Experiencing Engineering, where I learned about statics in “a fun hands-on way”. In the Materials Technology unit, the class looked at different types of materials and then tested their knowledge by making a longboard surfboard which I will test at the end of the semester.

Continued next page