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.

My future in naval engineering

Last year I completed year 12. Along the way I attended over 4,500 classes, and completed 30 subjects. That is a lot of classes, but one class stood out for me above all the rest – Mr Herman’s naval engineering course.

Unlike almost every other subject, as part of that group we were working together as a class to create something incredible. In my case it was a replica model of the ASC’s naval air warfare destroyer. The subject covered all of the processes to make a real ship, just on a small scale. The class challenged me and taught me many new skills relevant to the subject.

Another incredible part of the class was Mr Herman himself. The energy and passion that he brought to the class was one of the things that truly inspired me to choose this path for my future.

For a while I thought I wasn’t going to make it. This was because my ATAR was below the required entrance score. Despite this, I was still accepted into the course with the addition of bonus points and through the Flinders Uni STAT test.

Now I am enrolled in a Bachelor of Engineering (Naval Architecture) at Flinders University, and after 2 years it will take me to the Australian Maritime College in Tasmania, and after that potentially anywhere in the WORLD!

I honestly cannot wait for what the future holds for me, and it all stemmed from Mr Herman’s naval engineering course in year 12.

Some very positive news from a recent graduate regarding one of the many Maritime/STEM courses we run at Le Fevre High School. Congratulations to both George and Thierry Herman for their fantastic work.

George Howard
Le Fevre High School, class of 2015

Naval engineering at Le Fevre High School – how it works

Stage 1 – the basics

Both the stage 1 and 2 courses are now well embedded into the school curriculum. Stage 1 has 20 students in this class running throughout the year as a SACE integrated learning subject. This year students in semester 1 are studying submarine technologies, for which they will be constructing an underwater rover in partnership with the ASC. A small group of students will also be participating in the Subs in Schools program.

In the second semester students will study the physics of sailboats, for which they will create remote controlled land carts (to race in our school courtyard). Students will focus on aerodynamics, stability and righting moments, displacement and navigation principles.

Stage 2 – getting more advanced

This course is running throughout the year with 18 students currently enrolled, most of whom have completed stage 1. Students will design, prototype and create a model of the Bluefin, the AMC flagship boat and a former trawler.

The boat will be a 1-metre long, remote-controlled vessel. Throughout the projects the skills of maths and physics are important when studying aspects of naval architecture, displacement curves, stability and righting moments, hydrodynamics of hulls and propellers, navigation and electrochemistry. This really highlights how important STEM is in education and the maritime Industry.

To build on our relationship with industry and university, this year Le Fevre High School will once again take a group of students to visit the Australian Maritime College in Launceston, Tasmania.
Innovation seminar showcases success of Maritime High School

On 22 March, DCNS held an ‘innovation’ seminar at the Adelaide Convention Centre and Maritime Coordinator, Liam Narcys was excited to talk about the success of the Maritime program he runs at LeFevre (Maritime) High School.

“I talked about how well our Maritime program is doing since we became the Maritime High School of South Australia in 2011,” said Liam.

“We’ve had 15 students directly enter some type of maritime pathway (6 of these have moved on to an apprenticeship at ASC) as well as 3 to the Australian Maritime College in Launceston and others scattered in local industry.”

The importance of STEM in education and industry links were also a big part of his presentation.

With DCNS now confirmed as the winners of the bid for our future submarines and guaranteed build at Osborne it gives students a plethora of opportunities in the maritime and STEM fields.

“Our job as a school and a local community is to firstly give students the opportunity. If they decide it’s a career for them, we help support them through our course counselling process,” said Liam. “We have the programs at our school and across the state to make sure students of South Australia will be ready and well equipped to make a big impact in this industry.”

“As a school, we’ve always had STEM and innovation in the forefront of our minds; our students understand how important science, technology, engineering and mathematics are for their future ambitions,” said Liam. What has made a big difference to the school however, is the forthcoming build at Osborne, which will also affect primary school students as well those in secondary schooling.

During the past 2 years LeFevre High School has run STEM days for local primary school students where they come to the school for the day and experience STEM education in a high school environment. They get to use machines like a laser cutter and a 3D printer (which aren’t available at a primary school) as well as learning project-based maths and science skills.

“This is a fantastic announcement for the state and the local community of Port Adelaide,” said Liam, “as a school we look forward to continuing our great relationship with the ASC and building on our new relationship with DCNS.”

Maritime Industry Pathways – VET program

In the last week of term 1, 14 students from various South Australian schools spent a week at the Australian Maritime and Fisheries Academy (AMFA) at Port Adelaide.

This was the first of a 4-week block, and was entirely dedicated to the subject of ‘elements of shipboards safety’, which covers the mandatory safety competencies for the maritime industry.

During this week students participated in firefighting drills aboard the AMFA fire tug and learned about all the different types of fires and what device is best for each situation. This was followed by a day at the Adelaide Aquatic Centre in North Adelaide, where students participated in numerous safety drills including safety jumps off the 5-metre diving board, as well as many lifeboat drills. Another activity was ‘pitch darkness’, where students wear blacked-out goggles and then try to find their way back to the life raft by listening to other people’s voices. This is a great task to build teamwork.

The second stage of the course will be held in the last week of term 2, and navigation and boat handling will be the focus.

If you are interested in maritime pathways or this course for next year, visit www.afa.edu.au or www.amc.edu.au to see the opportunities available.

Maritime program – engineering trades

This year the ‘engineering trades course (maritime focus)’ has a group of enthusiastic students from LeFevre High School as well as Ocean View College and Underdale High School attending every Wednesday.

It’s going to be a challenging year for this group because in 2015, the ASC approached LeFevre High School to manufacture 3 ‘gun tampions’ for the remainder of the destroyer ships to be built in Adelaide.

Tampions are chrome steel covers over the gun muzzle at the bow of the ship when they come into port; they are purely show pieces to parade the vessel armory.

The students went out on a 10-day work placement, the first of 3, at the end of term 1. All students reportedly performed very well in the workplace and it was noticed how well they are able to respond to instructions and use hand tools with confidence.

The photo left shows Dale Sampson working at Arno’s Marine with an ex-student who did his work placement there 7 years ago. This student impressed Arno so much that he offered him an apprenticeship. Andrew Asanopolous is shown demonstrating to Dale the skills in dismantling this outboard motor.