

TERM 1: FRIDAY 16 MARCH 2018







## STEM CAMP FOR GIRLS AT UOW

I signed up for one of the best experiences in my life.

It was late 2017 when I clicked on an advertisement for a STEM (Science, Technology, Engineering and Mathematics) camp on my solitaire game. Unknowingly, I signed up for one of the best experiences in my life. The camp was held by the University Of Wollongong and we stayed on the Innovation Campus, living like university students for three days.

I was in a group of 3 other people as well as our group leader. Our group consisted of coffee junkie Jenna, Hamilton fanatic Helen, animal lover Molly, group leader and pun extraordinaire Melody and I. Together we were called ourselves the 'dysfunctional family'. During the camp we had a competition with all of the different teams to try and win the most points possible (spoiler alert: unfortunately we didn't win). The first day of the camp itself was more of an introduction to the program while the second day was when the fun began. The first thing we got to see was a presentation about the Bionic Bra and how it works. Next we walked through the university to see the drones and map our favourite locations using the GPS tracking system. The locations ranged from beaches to bedrooms with cats (that one was mine). Downstairs we viewed, made and tested our own artificial muscles using different materials. We then met the Physics Club, who were kind enough to make ice cream for us. After lunch we met with Transport NSW who told us about their Scholarship Program and about their connected and automatic cars. These cars also tested your fatigue and your focus. This was one of my favourite parts of the camp. After being hyped up on ice cream and fuelling Jenna's coffee addiction we went to Illawarra Coal to participate in four different activities. The first one was a mining simulator made for training using the Xbox. The second activity used alternate reality software to show us the different machines and things that happen inside of a mine. The best activity was the third activity. We got to put on helmets and head down into a training mine.

We went on a tour through the mine and had to act out the safety precautions, which were quite scary. We sat inside some of the machines and looked at the equipment. The last activity was, you guessed it, another lecture. We were told all about engineering and about the process of making mining safer. The next day we had to wake up extremely early to visit Bluescope Steelworks. We walked through the steelworks and saw the steel making process from the start to the finish. After that we had lunch and learnt all about iAccelerate, a program for entrepreneurs to meet and create new things with the help of the program. We learnt about 3D

printing, designed and then printed our own cat related products that we designed as entrepreneurs. After a hard day at work as entrepreneurs we took a relaxing stroll to the Illawarra Flame House where we found out about the sustainability of the house and participated in some activities to help design houses for living forever.

On our last day of the camp, we had a lecture about coding. I was extremely excited, as coding is definitely one of my passions. After the lecture we all did an hour of code. I was in the advanced course and made artwork using a coding software called Processing. I did fairly well and got a prize from Google for it. We had morning tea only to be greeted with breaking news! There was a crime at the university and we had to solve it, and with that, started Crypto Cluedo. We walked all around the university finding clues and doing maths to figure out who the murderer was. Our last activity was based all around Virtual Reality (VR) and Alternate Reality (AR). We got to use the VR headset and were shown all the different uses and applications for VR and AR in our everyday lives.

The experience was one I'll never forget and I have walked away with a strong passion for STEM. I would highly recommend this program for any Senior School girls who are interested.

## **Melanie Eggins**

Year 10 Student