

### **Griffith School of Engineering**

## PROFESSIONAL PRACTICE CATEGORY A, B & C ACTIVITY LOG SHEET

# 1. PERSONAL DETAILS Griffith identification Number Family Name: Barber 5 1 3 8 8 7 7 Other Names: Jessy

#### 2. PROFESSIONAL PRACTICE ACTIVITY

CATEGORY (See Note 1) A (See Notes 2 & 3) 5

Week Beginning19 / 12 / 22Week Ending23 / 12 / 22Supervisor Name:Alex ForwardContact Ph: +61755492370Organisation Name:Gilmour Space TechnologiesEmail: alex.forward@gspace.comOrganisation Address:5 Millennium Circuit, Helensvale

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#### 3. ACTIVITY DESCRIPTION & REFLECTION

#### **Description of Activities Undertaken:** (Approximately 50 words)

This week I had the opportunity to step my project up to a much higher level. It was discovered that the monitoring of the BMS systems and optical switching of the batteries was high priority for the first launch and so I started diving into PCB design for a new RDAU system. This was my first-time learning PCB design and so this week was dedicated to learning the basics of the software Altium. The first step was to analyse the previous schematics for the existing RDAU systems and start looking for components that would meet my design requirements.

**Discuss the Engineering Application Abilities Developed:** (Approximately 50 words) (See Note 5) Since this was my first PCB design, and I was leading the design of this new RDAU system, there was a level of uncertainty and ambiguity for the design requirements which I had to competently address. To do this I had to partition this massive task into management problems and elements for the purpose of designing. I watched many video tutorials, read chapters of textbooks and asked questions when needed to get myself setup with the program. I failed many times but started to see some progress by the end of the week. By Friday I had successfully chosen IC components and successfully added their footprints into an Altium component library.

Discuss the Professional and Personal Attributes Developed: (Approximately 50 words) (See Note 5) This week I displayed a commitment to life-long learning and professional development through my eagerness to dive into a complex software with zero experience with a determination to become competent in its use. I was especially determined to become competent with Altium and general PCB design because it is a gap in my knowledge and something important that I did not have the opportunity to learn during my studies. I made many mistakes and showed a level of commitment to critical self-review as a I detached my emotions from my designs. This was especially important considering how many errors I made in this first week of using the software.

#### 4. STUDENT SIGNATURE

Student Signature:	Date: 24-12-2022

#### Notes:

- 1. See the table provided in the Activity Log Guidelines for the definition of each category of professional practice.
- 2. For work experience paid on a casual hourly basis, a day of work is taken as 7.25 hours.
- 3. Only days between Monday and Friday can be counted for research undertaken at Griffith University in Category B Professional Practice, unless prior approval has been granted by the course convenor for 6008ENG.
- 4. At least one Activity Log Sheet must be provided with each Record Sheet for Professional Practice in categories A, B and C.
- 5. Refer to the Engineers Australia Stage 1 Competencies.