**Schedule A**

Use this document to provide relevant project details about your organization and your project and send it back to the faculty Capstone Projects Coordinator (email provided at the end of this document).  
Please use simple text formatting as the data within this document is exported into our Projects database and formatting is lost during the export process. **NOTE: One Project per Form please**

|  |  |  |
| --- | --- | --- |
| **1** | **Client/Organisation Name:** | Thales Australia – Air Traffic Management |
| **2** | **Organisation Description:  *Brief description of your business*** | Build and deploy Air Traffic Management software to customers worldwide |
| **3** | **Address:** | WTC, Northbank Wharf  Atrium Level  Siddeley St, Melbourne, VIC 30025 |
| **4** | https://www.thalesgroup.com/en/countries/asia-pacific/australia/aerospace/air-traffic-management | <https://www.thalesgroup.com/en/countries/asia-pacific/australia/aerospace/air-traffic-management> |
| **5** | **Direct Contact:** | Mark O’Flynn |
| **6** | **Contact Title:** | Innovation Manager |
| **7** | **Telephone:** | 03 8630 4672 |
| **8** | **Email:** | mark.oflynn@thalesgroup.com.au |
| **9** | **Host Supervisor: *Who, from your Organisation, will be supervising the Project?*** | Mark O’Flynn |
| **10** | **Supervisor Title:** | Innovation Manager |
| **11** | **Department:** | Technical Directorate |
| **12** | **Telephone(s):** | 03 8630 4672 |
| **13** | **Email:** | mark.oflynn@thalesgroup.com.au |
| **14** | **Project Title:** | UAV (Drone) In Case of Emergency Alternate Destination Planning |
| **15** | **Referred by: *Who referred the Client/Organisation to Swinburne?*** |  |
| **16** | **Estimated Project Length:  *e.g. 1 or 2 semesters*** | Either 1 (phase 1) or 2 (phase 2) Semesters |
| **17** | **Project Description:**  ***Brief description of project being undertaken.  (One Project per Pro-forma please)*** | There currently exists mission planning software to help UAV operators manage the missions of their UAV’s. This UAV mission planning involves calculating the route from the departure point to the destination. This route can be affected by constraints such as no fly zones, requirements to keep to specified corridors (i.e. not direct) etc.  This project is to look at how emergencies are managed when an UAV cannot reach its destination and needs to seek an alternate landing zone. Emergencies examples include unavailability of the destination, the UAV not having enough power to reach its destination etc  Phase 1:  We are looking for an application that accepts the planned route of an UAV, along with parameters such as maximum flight time and approved landing zones, and calculates each of the alternate landing zones that the UAV may need to use in case of an emergency. This should be graphically represented (on a map) and as a new mission plan that indicates the alternates. Any portions of the new mission plan that is not covered by an emergency alternate is to highlighted.  Phase 2:  The application can be extended to include dynamic mission re-planning – such that if an emergency situation occurs mid-flight, the application calculates the nearest alternate landing zone. The recalculation needs to take into account geo-fenced areas as well as the constraints determined in phase 1.    Team responsibilities include:   * Initial workshops with the customer to detail system requirements and design * Selection of the best technology stack to use * Development of application based on the requirement * Delivery of the working application with supporting documentation |
| **18** | **Project Specialisations Area:   *e.g. Research, Mobile Application Design(Android & IOS); Database Design; Network Design & Security; Robotics; Application Development; Systems Analysis & Design; Web Development & Design etc.*** | Software and Web design and development  Development of the alternate calculation algorithims. |
| **19** | **Project Skills:   *Brief description of any specific skills students will require undertaking this project. e.g. Business Analysis; Systems Analysis; Project Management; Software Programming; OIS; Android; Business Intelligence etc.*** | Web and Software development and programming |
| **20** | **Project Environment:   *Hardware/Software/ Programming Languages e.g.***  ***Android; IOS; C++; HTML; CCS3; Java; SQL; Visual Basic Script; Visual C++; XML, UNIX, Windows etc.*** | Software frameworks to be determined by project |
| **21** | **Research Component:**  ***(Where applicable use this section to state topic of research relevant to this project. This may be part of the project or the entire project)*** | NA |

|  |  |
| --- | --- |
| **Overview of this Proposal** | |
| 1. The purpose of this exercise is to provide an educational opportunity for the Student(s) to obtain real-world experience as part of their course of study. 2. The Contracting Party or Host Organisation wishes to support the skills development of the Students by providing details of their project to Swinburne and agrees to provide the Students with the opportunity to undertake the Project. 3. All parties acknowledge that Project details may vary as the skills of the Student(s) are assessed or the Project requirements change. 4. Neither Swinburne nor the Student(s) provides any guarantee in relation to the quality, originality, operability, delivery or any other aspect of any work undertaken or material produced by the Student(s) as part of the Project. 5. The relationship between the parties is voluntary and involves no payment or only nominal work experience payments within regulatory requirements. 6. Swinburne will arrange for the Students to assign any Intellectual Property in the Projects to Swinburne. Swinburne will then assign the Project IP to the Contracting Party or Host Organisation. 7. The Contracting Party, or Host Organisation, and Swinburne agree to perform their obligations in accordance with the terms and conditions of the STUDENT PROJECT AGREEMENT. 8. The STUDENT PROJECT AGREEMENT will be issued to the Contracting Party or Host Organisation once their Project has been accepted by Swinburne and students have been assigned to the project. | |
| **Permission to market the Proposal to Students** | |
| *Swinburne University seeks permission to market an overview of your project to prospective students, as an example of the types of projects offered under the Internship Project unit.  NB: No company or personal details will be identified.* | |
| I Agree to allow details of the project to be marketed to prospective students. | |
| **Name:** | Mark O’Flynn |
| **Date:** | 15/02/2018 |

**Send this completed Capstone Proposal to the Faculty of Science, Engineering and Technology, School of Software and Electrical Engineering, Capstone Projects Coordinator at: rbartels@swin.edu.au**