**Research Facets Project : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Supervisor : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date : \_\_\_\_\_\_\_\_**

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| **RSD Level 4** | **RSD Level 5** | **Task** | **Timeframe** |
| **Generate questions/aims/ hypotheses framed within structured guidelines** | **Generate questions/aims/ hypotheses based on experience, expertise and literature** | *e.g. Identify the broader project aim, such as “investigating the use of recycled materials in concrete beams”*  *and, Identify the specific research question, such as “What is the relationship between the deformation and tensile strength in concrete beams reinforced with steel or used tyre-rubber”* | *e.g. Week 2-3* |
| **Collect and record self-determined information/ data from self-selected sources, choosing an appropriate methodology based on structured guidelines.** | **Collect and record self-determined information/data from self-selected sources, choosing or devising an appropriate methodology with self-structured guidelines.** | *e.g. adapt existing mechanical tests of steel-reinforced beams to testing rubber tyre-reinforced steel beams. Construct a prototype and carry out these tests, using several different types of tyre* | *e.g. Weeks 3-7* |
| **Evaluate information/data and the inquiry process comprehensively using self-determined criteria developed within structured guidelines. Reflect insightfully to refine others’ processes.** | **Evaluate information/data and inquiry process rigorously using self-generated criteria based on experience, expertise and the literature. Reflect insightfully to renew others’ processes.** | *e.g. Compare measured characteristics of rubber-reinforced concrete beams with values identified and calculated from the literature. Critique experimental technique to identify sources of error, and propose refinements to processes.* | *e.g. Weeks 3-7* |
| **Organise information/data using student-determined structures, and manage the processes, within the parameters set by the guidelines.** | **Organise information/data using student-determined structures and management of processes.** | *e.g. Keep a research journal & experimental data*  *e.g. Check in regularly with supervisors to ensure project is on schedule to achieve all milestones* | *Weeks 1-13* |
| **Analyse and create information/data to fill knowledge gaps stated by others.** | **Analyse and create information/data to fill student-identified gaps or extend knowledge.** | *e.g. Perform statistical analysis on the data collected to identify the relationship mentioned in the research question. Identify new directions and questions arising from the research thus far, and evaluate whether it is appropriate and viable to pursue them within this research project, or instead recommend them as topics of further research* | *Weeks 3-13* |
| **Use discipline-specific language and genres to address gaps of a self-selected audience. Apply innovatively the knowledge developed to a different context. Probe and specify ethical, social and cultural (ESC) issues in each relevant context.** | **Use appropriate language and genre to extend the knowledge of a range of audiences. Apply innovatively the knowledge developed to multiple contexts. Probe and specify ESC issues that emerge broadly.** | *e.g. Present various reports and presentations about the research, in particular a paper at the end of year engineering undergraduate research conference.*  *e.g. Compare how used tyre rubber is disposed of in Australia and elsewhere, how much steel is used in reinforcing concrete, and evaluate what the impact of reusing tyre rubber in concrete could be on rubber disposal and the steel industry* | *e.g. Week 7*  *e.g. Weeks 3-9* |