<table>
<thead>
<tr>
<th>Field</th>
<th>Organization</th>
<th>Placement Responsibilities</th>
</tr>
</thead>
</table>
| Aerospace Engineering/Aviation | Commercial & Private Aircraft Management Services | - Close observation and interaction with aircraft maintenance activities  
- Assist with maintenance planning activities  
- Assist drafting maintenance records for activities performed  
- Reviewing current maintenance processes & procedures for improvements  
- Assist with aeronautical product receipt inspection processes |
| Biomedical Engineering       | Brain and Development Organization Research      | - Biomedical Engineering - Variety of projects and introduction to the professional biomedical laboratory & research setting  
- Project #1: Manual annotation of ECG signal (graphical user interface suitable for medical staff)  
- Project #2: Standardization of ECG dataset for online publication of the full database |
| Biomedical Engineering       | Biotech Company - Sleep Disorders                 | - Facial Photography  
- CAD Modelling  
- 3D Printing and Finishing  
- Research and Experimentation  
- Technician Work  
- Customer Liaison  
- Miscellaneous Office Tasks |
| Biomedical Engineering       | Scientific Research Organisation                  | - Help development of a sleep apnea device, including: C/C++ using Qt, schematic and PCB layout using Kicad, testing device, writing progress reports, and interacting with rest of team. |
| Biomedical Engineering       | University Medical Division                       | - Immunohistochemistry  
- Electrophysiological recordings from brain slices  
- Imaging  
- PCR  
- Biomedical devices |
| Biomedical Engineering       | International Research Organization               | - Optimize printing parameters for patterning proteins on glass surfaces (using an instrument called PRIMO). Print protein on hydrogel surfaces using soft lithography.  
- Image fluorescent protein on PRIMO printed glass and patterned hydrogels using epifluorescent and/or confocal microscopy.  
- Quantitate protein uniformity and pattern fidelity across surfaces. If time allows, plate cells onto pattern surfaces and assess cell shape. |
| Biomedical Engineering       | Medical Product Innovation Company                | - Software development  
- IT system configuration and management  
- Web technologies  
- Photography, photogrammetry  
- 3D printing  
- Various office related duties |
| Chemical Engineering         | Industrial Paint Company                          | - Assist in product/ raw material quality testing  
- Assist in process improvement, lean manufacturing, and standardization  
- Research and development projects in process optimization  
- Assist in developing inventory control system |
| Chemical Engineering         | Australian University                              | - Assisting with conducting research study  
- Assisting with research study specifically working on the potential for production of low cost functional food that is rich in Vitamin D  
- Assisting with looking at both challenges and processes  
- Assisting with preparing final reports and observational duties  
- Assisting with any other Chemical Engineering administrative-based tasks |
| Chemical Engineering         | Chemical Company                                  | - Cooling water flow study  
- P&ID update  
- Pipe labelling |
| Chemical Engineering | Specialities and Masterbatch company | - Specific market analysis to be determined by Host Organizations  
- Analyse market via discussions with market leaders and organizations  
- Discuss findings with Host Organizations market champions  
- Analyse import statistics  
- Attend meetings with market participants together with Host Organization |
|----------------------|-------------------------------|---|
| Chemical Engineering | Battery Manufacturer | - Study the chemistry of battery manufacture and operation  
- Assist technical manager in selection of specialised chemical components for new product  
- Conduct various proof of concept tests, compile information and produce reports  
- Assist QA manager in assessing components used for manufacture  
- Variety of other chemical and R&D tasks as required |
| Chemical Engineering | R&D Program for Dairy Farmers | - Work with the laboratory manager to develop a new alkane method for determination of dairy cow intakes  
- Laboratory Protocols and procedures- as per Australian Standard  
- Data Analysis and science research methods  
- Report writing and documentation of findings |
| Chemical Engineering | Environmental Goods & Services Company | Tasks and projects including but not limited to the following:  
- Research (Policy, Business issues) on the Australian context of the company's Sustainable Materials Work  
- Research (Policy, Business issues) on the Australian context of the company's Climate and Energy Work |
| Chemistry/ Chemical Engineering | Health Supplement Manufacturer | - In process testing in dry manufacture  
- Sampling of the incoming raw materials (for microbial and physical testing)  
- Sampling of the bulk product (for microbial and physical testing)  
- GIN form, batch manufacturing records and packing records filing |
| Civil Engineering / Energy Engineering | Ecologically Sustainable Development Consultancy | - Assisting in accessing the energy efficiency requirements of a project according to National Construction Code of Australia  
- Assisting in using second generation ESD residential software  
- Assisting in learning how to certify both residential and commercial products  
- Assisting with any Environmental concerns and Energy based duties gaining exposure within industry |
| Computer Science | Security Consulting Company | - Security Productivity Tools Development under company consultant supervision  
- Software Development under company consultant supervision |
| Computer Science | NGO Face-to-Face Fundraising Campaigns | Participates in the software product development life cycle:  
- Feasibility analysis  
- Project estimating  
- Design  
- Software development/coding  
- Software testing  
- Documentation  
- Keeps abreast of new developments in the IT field |
| Computer Science / Information Technology | Healthcare IT Solutions | - Application tester, write test scenarios and test program functionality  
- IT business analyst, write user stories for improvements (or bugs) in applications  
- IT project manager, monitor and register project progress of outsourced development teams  
- IT helpdesk analyst, familiar with databases |
| Computer Science / Information Technology | Security Consulting Company | - Development assistance on various projects  
- Assistance in Application Design  
- Web application Security testing assistance  
- General IT duties as required. |
| Computer Science / Software Engineering | Multidisciplinary Research Organisation | - Assist designing and conducting tests  
- Assist making models/prototypes of products  
- Assist recording, analysing and interpreting test data  
- Assist in writing software.  
- Assist in building hardware |
| Computer Science / Software Engineering | Optical Communication Components and Subsystems | Code reviews  
- Writing script tests  
- Software engineering  
- Performing test analysis |
|----------------------------------------|-------------------------------------------|--------------------------------------------------|
| Environmental Engineering              | Environmental Policy Company              | Assisting with general office duties  
- Assist with data analysis when required  
- Assist with field work when required  
- Attend internal training sessions where appropriate |
| Materials Science / Engineering        | Cleanroom Design and Construction Services | Creation of brochures (both product and services)  
- Creation of mass mail campaigns  
- Assessment of effectiveness  
- Cost analysis and ROI calculations  
- SEO strategy analysis and improvement  
- Creating suitable metrics and KPIs;  
- Review of existing quoting procedures;  
- Reviewing nominated internal procedures and making recommendations for improvements;  
- Creation and implementation of quote documentation;  
- Creating documents identifying current systems and imperfections for management review. |
| Mechanical Engineering                 | Developer & Manufacturer of High-Resolution 3D Machine Vision Systems | Assembling and mounting prototype units to test vehicles;  
- Operating and validating prototypes following structured test plans;  
- Designing test fixtures for mounting; and  
- Analysing field data, interpreting results and feeding analysis back to design team |
| Mechanical Engineering                 | Optical Communication Components and Subsystems | Development of a compact desktop thermal chamber to test electronic components across a range of temperatures. An understanding of (or interest in) Peltier devices, PWM, PID control would be useful. It would be hands-on, and the intern would work alongside technicians to design and construct a working prototype and do functional testing.  
- Assistance with building of mechatronic equipment using stepper motors/ basic robotics (or such like), including investigation into practical use of basic automation for small appliances and fixtures.  
- The work would be of more practical than theoretical nature, with hands-on approach and exposure to a workshop environment and working with a variety of technicians (including electronics, CNC machinery, pneumatic fittings). |
| Mechanical Engineering                 | Optical Communication Components and Subsystems | Development of a device to measure and control flow and temperature of nitrogen gas. This would likely involve:  
- Basic electronic control system to read electronic inputs and convert to outputs.  
- Solenoid or flow control  
- Heating element control  
- Calculations related to heat transfer / heat exchangers  
- Measurement techniques  
- Assistance with building of mechatronic equipment using stepper motors/ basic robotics (or such like), including investigation into practical use of basic automation for small applications and fixtures.  
- Experimentation and evaluation of different methods of dry baking electronic devices, including developing benchmarks and metric for evaluation. |
| Mechanical Engineering                 | Heating, Cooling, and Insulation Supplier | Hydronic floor heating design and quotation  
- Electric floor heating design and quotation  
- Hydronic system improvements for design and quotation methods  
- Testing of gas and electric radiant heaters |
| Mechanical Engineering                 | Manufacturer and Importer of Mexican and Latin Foods | New Packaging Line - design of product  
- Commission of the total Line.  
- Fine tuning parameters.  
- Statistic reporting of output  
- Ensure settings, records, drawings, manuals are complete & documented  
- Corresponding with Suppliers, our Equipment requirements & scope.  
- Reviewing & Analyse of Quotation, product specification, drawings of various options  
- Review & feedback with Suppliers  
- Equipment recommendation |
| Mechanical Engineering | Cable Manufacturer | 1. ACMA - create a database for all required cables  
| - The project requires data entry for cables description, status, test reports, etc.  
| - The database can be in MS Excel with some macro  
| 2. Optical Fibre in process traceability on PC  
| - The project requires converting the hard copies records to PC storage |