UQ BE(Hons)/ME Industry Placement Project Scope (Chemical)

Commencement:	Semester 2, Year		
Project Start Date:	**xx/yy/year**	Project End Date:	**xx/yy/year**
Company Name:	AgriFarm Ltd	Address:	Street address

ESSENTIAL INFORMATION			
Project Title:	Investigation into the affect of additives on the performance of the animal feed product granulation process.		
Is there a $17,000 scholarship available?	Yes		
Student on-site Supervising Engineer name:		Student on-site Supervising Engineer phone:	
Student on-site Supervising Engineer title:	Engineering Manager	Student on-site Supervising Engineer email:	
Preferred engineering discipline:	Process or Chemical	Location of Project placement:	Brisbane
Is the project subject to IP/confidentiality constraints? e.g. is an embargo required on the Student's final report to limit access by a third party?	Yes	If yes, what are your requirements e.g. NDA and embargo for 6 months	NDA and embargo for 6 months
If an internal document review is required prior to student submission, please outline how this will be managed	Student to submit report to supervising engineer for review prior to submission for marking.		

ORGANISATIONAL BACKGROUND (MAX. 100 WORDS)
AgriFarm is a global leader in the production of a range of animal feed products. We operate four main production facilities in Australia, and employ over 5,000 people nationally. We export our products to over 20 countries around the world. We are dedicated to Zero Harm in our production facilities and we are committed to sustainable production.
PROJECT MOTIVATION/BUSINESS DRIVER (MAX. 150 WORDS)
AgriFarm has experienced a steady growth in demand for its products, however with rising raw material costs and energy prices, we need to innovate to remain competitive in the global marketplace. In particular, we wish to develop a deeper understanding of the underlying mechanisms in our product granulation line so that we can implement changes reliably and safely. We recognise that product granulation performance is dependent on many factors including the water addition and composition of our feed materials. We are now looking to investigate the impact of a range of animal supplements on the granulation efficiency and effectiveness.

PROJECT AIM (MAX. 100 WORDS)
The aim of the study is to investigate how a range of agri-additives affects the process and economic performance of the granulation production line.
PROJECT SCOPE AND POTENTIAL METHODOLOGY (MAX. 200 WORDS)
Summarise the current understanding of the role of additives in granulation and identify options from published and patent literature for alternative materials. Investigate the effectiveness of alternative materials at the pilot plant scale within a model of the current process and develop methods for how selected materials and related technologies may be introduced to existing processes. Generate capital and operating cost estimates for the technologies as well as quantification of carbon footprint and identification of opportunities and threats associated with the development and implementation of the technology.
REQUIRED DELIVERABLES (MAX. 100 WORDS)
Summary report, literature review, laboratory report, design criteria, mass balance, process flow diagrams, , processing options assessment, sized major equipment list, capital cost, operating cost, carbon footprint calculation, final report.
KEY STAKEHOLDERS (MAX. 100 WORDS)
OTHER COMMENTS INCLUDING HEALTH CONSIDERATIONS (E.G. NOT SUITED TO ASTHMA SUFFERS)