

## UQ Summer or Winter Research Project Description

Please use this template to create a description of each research project, eligibility requirements and expected deliverables. Project details can then be uploaded to each faculty, school, institute, and centre webpage prior to the launch of the program.

<b>Project title:</b>	Rock reactivity during compressed air energy storage
<b>Hours of engagement &amp; delivery mode</b>	<p>For the Summer program, students will be engaged for 6 weeks only.</p> <p>Hours of engagement must be between 20 – 36 hrs per week.</p> <p>After some initial on-site work, the project can mainly be completed through a hybrid arrangement.</p>
<b>Description:</b>	<p>Compressed air energy storage is a potential way to store renewable energy by pumping air underground into a suitable reservoir. The research project will involve assessing different potential reservoir rocks for gas-water-rock reactivity during compressed air energy storage underground. This will involve using mineral, porosity and water chemistry data to run geochemical models and look at changes to the rock and groundwater.</p>
<b>Expected outcomes and deliverables:</b>	<p>You will gain skills in geochemical assessment and modelling. You will have the opportunity to generate a journal publication from the research. A short report and oral presentation at the end of the project.</p>
<b>Suitable for:</b>	<p>This will suit students with a background in chemistry, geology or chemical engineering or similar and an interest in geochemistry.</p>
<b>Primary Supervisor:</b>	Dr Julie Pearce
<b>Further info:</b>	<p>Contact for further information: J.pearce2@uq.edu.au naturalgas@uq.edu.au</p>