

## Exciting Engineer Design Challenges using Lego to Build Solutions using English Language

### Course Teacher Information:

Ms Athena Swindells is a BMH Prep Homeroom Teacher in her second year at the school. She is experienced with Inquiry-based teaching and excels at providing both open-ended and structured opportunities for students through which they can build their critical thinking, problem solving and higher order thinking skills. She is excited about offering a Lego Engineering course to build on students innate curiosity and lead them to successful outcomes.

Basic Information Overview	
Year Group (s)	Prep 3-5
Teacher Source	BMH
Number of lessons	1 per week, 14 lessons in Term 2
Language	English
Venue	Library Maker Space
Class Time	Thursday, 15:30-16:30

Course Overview	
Enrollment Criteria	Students should have an interest in STEAM and some experience in Lego play. They should be able to work well with others and follow basic instructions and answer simple questions in English.
Engage and Assess	In the first weeks of the course, students will be assessed on their ability to create Lego structures following simple instructions, both individually and in a team. They will be introduced to and lead through a design process (design ~make ~ test) to achieve a particular goal or outcome and discuss possible alternatives.
Explore and Develop	In the middle weeks of the course, students will build their cooperation and communication skills as they work in teams to solve different problems and challenges. They will start to understand that there is no one correct solution, but rather infinite ways to successfully solve a problem. They will learn to sketch designs, experiment and explore ideas.
Refine and Present	In the final weeks of the course, students will be able to reflect upon a range of tools, processes, criteria and possible outcomes. They will be able to select what they consider to be the most appropriate materials and strategies to achieve the best result and refine and discuss throughout the design process.
Parent Engagement Opportunity	Parents will be able to view stages of the learning and designing process from each of the three stages of the course through SeeSaw.
Others	

