

**SCHOOL OF PHYSICS, UNIVERSITY OF SYDNEY**  
**JUNIOR PHYSICS EXPERIMENTAL PROJECTS**  
**PROJECT PROPOSAL FORM**

*Please use a black or blue pen when completing this form.*

<b>Project Group</b> (eg 6TECG)	5ADVC
<b>Project Title</b>	Relationship Between Angle of Attack and Coefficient of Lift for Different Aerofoils

**Project Group Members (\* signature required for marks to be awarded)**

#	SID	First Name	Surname	Signature*
1				
2				
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4				
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6				
7				

**Project Description**

Using two different aerofoils, our group will use the equation for lift to determine the relationship between the angle of attack and the coefficient of lift of an aerofoil. From this data, we will determine the constant of proportionality that relates angle of attack to the coefficient of lift for each individual aerofoil. Thus, we aim to determine the aerofoil that that is able to maintain flight and resist stall for the greater angles of attack.

The air speed will remain constant throughout the experiment, the angle of attack will instead be changed, and then measured in order to graph coefficient of lift vs angle of attack.

<p><i>Official use only - Must be completed by tutor mentoring the Project Group</i></p> <p><i>Tutor's name &amp; comments</i></p>	<p style="text-align: center;"><b>Mark / 4</b></p>
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Enter your Project Group Number eg 6TECG

**Equipment and Resources** - It is important that this section is completed fully because it is used to prepare your Project Kits and organise your allocated space. Indicate whether you will supply the item (**S**) or Physics (**P**).

Supply S or P	Item and comments	Model / Range /Specifications
P	Aerofoils (pre-made), with at least two distinct shapes	
P	Wind Generator (ie fan or blower)	
P	Apparatus to hold the wing stationery whilst the wind is blown across it	
P	Electronic scales (range slightly higher than the aerofoil weight and quite sensitive)	
S	Protractor	

**Description of Project**

### **Project Timeline**

<b>Activity</b>	<b>Names and Contributions</b>
<b>Week 1</b>	
<b>Week 2</b>	
<b>Week 3</b>	
<b>Week 4: Oral Presentation</b>	
<b>Report</b>	

### **What do you hope to learn from project?**

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### **References**

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