

# Learning to fly in Engineering

These are the skills and habits which outstanding students of Engineering develop. Do as many of these as possible to become completely independent in the subject and to develop the skills and knowledge needed to attain 8/9 at GCSE and A\* at A Level. **Remember that just doing what your teacher tells you - in your lessons and beyond - is not enough to develop your full potential in the subject.**

## In your lessons

Prior to attending a lesson, make arrangements for independent research on a topic which demonstrates an area of study. This involves students acquiring an understanding of their learning, being motivated to learn and collaborating with teachers to structure their learning environment. This will encompass students working alone; teachers have a key part to play in enabling and supporting independent learning though, for example, structuring group work.

- Ask specific questions about work that you do not understand.
- Whilst doing practical work ask yourself how you can improve what you are doing.
- Work with other students. Discussion and explanation to each other also helps you to learn.
- Thinking critically about your own work and finding ways to improve it.
- Evaluate your work and think of alternative solutions and future developments.

## Between your lessons

- Look back over your notes and activities from the last lesson.
- Try all work on your own, go to see your teacher to ask for clarification and guidance if needed.
- Research beyond the curriculum
- Making notes of any questions to ask your teachers or look up.

## Beyond your lessons

- Acquire and deploy information you have covered in the lesson and beyond
- Communicate effectively using different media
- Organise yourselves by collating your folder into topic areas of importance
- Work through examination problem and have them checked. Relate to others in the classroom who might have other relevant information that you have not covered.
- Develop as an engineer by utilising other skills such as leadership skills, cross-cultural experience, time-management skills, research experience, and job experience. Many of these experiences will help you develop and determine their future academic and career paths.