

HOW TO GUIDE #17 STEM TRAINING

▶ ALL ABOUT STEM ACTIVITIES

WHAT IS STEM?

Science Technology, Engineering and Mathematics (STEM). The RAF Air Cadets syllabus has a long established programme of these subjects; some newer areas we are expanding or developing upon. STEM can cover a huge range of subjects, but we mainly focus on those that are relevant to our organisation, such as *Cyber, Radios, Space, Rocketry, Logistics, Robotics, Engineering, Aviation, Design,* and *Drones*.



WHY IS IT IMPORTANT?

It is widely acknowledged that the UK has a serious skills shortage related to people training towards, or having completed training and education, in STEM subjects. Therefore there is a skills gap in industry (incl Military engineering). The RAF, in particular, are aiming to expand the number of personnel involved in Coding and Space. Nationally, there is a huge shortage of engineers – 80,000 new engineers, every year, for at least the next decade are needed!

GET INVOLVED

Even if you're not sure if you are interested in a STEM career, you can still get involved! Why not start with the RAFAC STEM Activities booklet – some may be simple activities, but they may lead you on to projects,

national competitions and maybe a future career path; the RAFAC booklet on STEM Challenges, Events & Camps gives you more of an insight of these events.

CREST STEM AWARDS

CREST is the UK's only nationally-recognised industry scheme for student-led project work in STEM subjects, managed by the **British Science Association**. CREST offers awards at Discovery, Bronze, Silver and Gold levels. **How To Guide #9** provides more information.

APPRENTICESHIPS

In recent years, many large companies in industry and Defence have offered a wide range of STEM-related apprenticeships – many of these will understand the experience that Air Cadets gain during their service and will view this positively.

The RAF also offer one of the best-recognised apprentice schemes in the UK (see their website: <https://www.raf.mod.uk/recruitment/apprenticeships>).

The RAFAC booklet STEM Job Profiles, Apprenticeships & Scholarships gives more information.

