

Amateur Radio Licence Training

Amateur radio is a popular technical hobby with such a variety of features as to interest everyone. Amateur radio enthusiasts come from all walks of life and are of all ages, income levels and nationalities. Whether you want to chat to someone at home or abroad over the radio, transmit Morse code or via satellite, contribute to cutting edge technology or be available to give emergency communications support to your community, there will be something for you.

Anyone can listen to amateur radio transmissions, and that's a good way to start, but to get a licence to begin transmitting you need to pass a simple multiple-choice test called the Foundation exam. This basic level exam requires a minimum acceptable level of skill and experience to ensure that you know what you are allowed to do, and not to do, safely and in particular how to avoid causing interference to other radio users, including the essential services.

Ofcom, the UK communications regulator, will issue you with a unique callsign and licence when you've passed the relevant Radio Communications Exam (RCE). The Foundation Licence permits you to transmit on certain bands of frequencies allocated to radio amateurs, but only using commercially manufactured equipment (or built from a recognised commercial kit) with a maximum transmitted power of 10 Watts.

To gain access to all the authorised amateur bands and operate at powers up to 50 Watts, you then have to pass the Intermediate Licence exam. This is a bit more technical, as you must demonstrate an adequate understanding of how radio equipment works to allow you to build gear to your own design, or someone else's, without causing interference to other radio users.

To get the Full Licence privileges, which include using a maximum power of 400 Watts, the ability to operate abroad and maritime mobile, and to supervise an unlicensed trainee, you then have to pass the Advanced RCE. This exam is a good deal more technical and requires a much more detailed understanding of radio circuits and transmission modes.

Get an Amateur Radio Licence

Phil Parkman G3MGQ is the clubs licence trainer and has successfully completed the RSGB Train-the-Trainer course and is an Accredited Assessor for all three levels of the RCE.

Courses are run as and when required to suit the candidates as far as possible. We have successfully trained people, senior citizens down to children as young 12, with no technical background as well as those with professional technical qualifications.

As a basis for each of the three licence levels, we use the appropriate RSGB publication; Foundation Licence Now, Intermediate Licence – Building on the Foundation and Advance! The Full Licence Manual.

The Foundation Licence

The Foundation course takes up to 12 hours of instruction, which can be given in 6 weekly sessions, or over 1 or 2 weekends, to suit the candidates. The course involves working through the training manual at the candidate's own pace, interspersed with practical sessions using the radio on HF and VHF.

The exam is marked on the spot and successful candidates can use their pass certificate to obtain their licence & callsign from the Ofcom website about a week later, after the RSGB has verified the marking of the exam papers. Correct answers are required to at least 19 of the 26 multiple-choice questions within the 45 minutes allowed for the exam, which can be held locally in any "public place", usually one of our two registered exam centres.

The Intermediate Licence

The Intermediate course is rather more technical, requiring up to 20 hours of instruction depending on the prior technical knowledge of the candidates. Again this can be done in 2hr sessions each week or over a couple of weekends. It includes some practical assessments involving building some simple circuits to demonstrate how some basic electronic components work and taking measurements. It also involves constructing a radio-related project, preferably something that you'll be able to use when you get your Intermediate licence!

Tutors have circuit breadboards and the components available for these demonstrations as well as computer circuit simulations, but Phil, G3MGQ our chief instructor, has also developed a "distance learning" course which enables the candidate to complete the weekly assignments at home, furnishing the results as email attachments for assessment. The exam is held at a local Registered RCE centre and comprises 45 multiple-choice questions to be answered within the 75 minutes allowed. Again the exam is marked there and then, the pass mark being 60%, and successful candidates will be able to

register their pass certificate on the Ofcom website about a week later to choose their Intermediate callsign.

The Advanced Licence



The level of understanding required of how radio circuits work is a great deal higher for the Advanced Exam which, as it has no associated practical assessment, can be studied at home on a distance learning basis. Phil G3MGQ (second from the left in the photograph) is one of the tutors on the Bath-Based Advanced Distance Learning course who were awarded the RSGB Kenwood Trophy in 2012 for “their significant contribution to training & development in Amateur Radio”. The [BBADL](#) is a 20-week home study course, with weekly on-line tutorial support, which has achieved a very high success rate. Phil also has PowerPoint presentations and computer simulations, that he developed for a group of local candidates who he tutored, to explore and understand the technicalities.

The Advanced Exam is held on a different day of the week at two monthly intervals and comprises 62 multiple-choice questions to be answered within two hours. This exam is marked at the RSGB Headquarters and the results notified to candidates within 10 days. There is no set pass mark, being assessed by the examiners from these and previous papers they have marked, but is about 60%.

Each of the three exams can usually be taken at the RSGB Convention in October each year.

Our tutors are always willing to help new Licensees to get on the air and answer their questions. HERC also gives all its Foundation trainees free membership of the Club for part of the current year, so that new licensees can sample the variety of amateur radio interests its members enjoy.

Ready to get started on your Amateur Radio Licence?

Phil G3MGQ, the HERC training officer, is fully committed at this time and is unable to take on new individual students at present although he continues to work with BSARS on group training weekends.

The Distance Learning courses run by the Bath Radio Group: Intermediate course runs October to January, Advanced course January to June and July to December. Contact for BBADL is Steve Hartley **g0fuw@tiscali.co.uk**

Have you already passed your Foundation licence exam and need some extra help? If so why not visit our new resource for recently passed licencees called, [I passed my Foundation Amateur Radio Licence. What can I do now?](#)