

# SMATV & IRS Networks (Distance Learning)

## Benefits

The course will provide, at an advanced level, a theoretical base for systems installers including all the latest information on digital terrestrial & satellite broadcasting and reception. Once the course has been passed CAI members will be able to register as a 'CAI Approved Systems Installer' and a 'Specialist Safety Electrical Installer' (SSEI).

## Learning style

The course provides theoretical underpinning knowledge by distance learning techniques followed by a practical assessment. Each unit will be assessed individually with a multiple choice paper and a short answer paper. Once you have completed and passed all 10 units you will need to take a practical assessment. For each unit passed you will receive a CAI certificate with your grade. You need to pass all units and the practical assessment to then be awarded your final certificate.

The coursework will be sent to you electronically so it is important that you have access to a computer and a current e-mail address.

Before embarking on any of the course units you will be sent a Maths Primer & Maths Assessment. You need to pass this assessment in order to start the course. Those who do not pass the assessment will need to find a tutor local to them to help with this aspect of the course and redo the assessment once they feel confident with their maths ability.

## Who should attend?

The course is designed for installers who have experience & practical skills and wish to improve or enhance their knowledge of SMATV and IRS networks. We must stress that this course is not suitable for absolute beginners. Ideal prior learning would be the CAI Basic Aerial and Satellite Installation courses. There is also quite a lot of maths involved and you should be confident in your mathematical abilities and how to use a scientific calculator. If you are in any doubt about the suitability of this course then please do not hesitate to contact us.

## Course Content

This course is split into units and can be purchased as a whole or in its individual components. The units have been updated and are now in full colour and have interactive elements.

- Unit 1 - Propagation of Radio Waves
- Unit 2 - Cables & Transmission Lines
- Unit 3 - Signal Generation & Broadcasting
- Unit 4 - Principles of Aerials
- Unit 5 - Test Equipment
- Unit 6 - Satellite Reception
- Unit 7 - IRS Networks, including principles for multi-satellite reception
- Unit 8 - Choice of Antenna, Installation & Maintenance
- Unit 9 - Signal Combining & Splitting
- Unit 10 - SMATV Networks, including Fibre Optic Technology

There are also two support units:

Basic Electronic Theory - to be studied along with Unit 2

The Decibel - to be studied along with Units 2 & 3

In addition to completing all 10 units it is also a requirement that students pass the 'Making the Bond' at a cost of £165 for members and £250 for non-members.

### **Dates**

You can start this course whenever you wish and take as long over each unit as you need. Although we would strongly recommend starting at Unit 1 (as later units sometimes refer back to earlier work), you can, if you wish, pick units out of order.

### **Costs**

Maths Primer & Assessment - £30 for members and £40 for non-members

Individual Units - £65 for members and £80 for non-members

Making the Bond - £165 for members and £250 for non-members

### **Enrolment**

Should you wish to start this course then please contact Amanda Ward on [amanda.ward@cai.org.uk](mailto:amanda.ward@cai.org.uk) or call 01923 803030