

Science and Technology

How to earn your badge...

To achieve this badge you need to choose from Options 1 to 5, then complete the **all** the tasks outlined under your chosen option. You should be aiming to work towards this badge over a period of 6 to 12 months.

Option 1 - Meteorology

Option 2 - Mechanic

Option 3 - Radio communication

Option 4 - Electronics

Option 5 - Astronomy

Option 1: Meteorology

1. Regularly record weather observations and measurements over a period of time. You can break up the time if you like – you don't have to keep continuous records
2. Demonstrate your skills in meteorological recording and observation to a group of young people
3. Give a detailed explanation of the formation of clouds and the weather associated with different clouds and fronts
4. Find out detailed information about how weather maps are produced. Show how you interpret them for use in Scouting activities



Option 2: Mechanic

1. Regularly maintain a mechanical machine over a period of time. You should use the time to learn a variety of techniques
2. Demonstrate your mechanical knowledge. Explain the principles of operating an engine, gearbox and differential axle
3. Talk about the safety rules for machine maintenance and how you use the skills you've learned responsibly



Option 3: Radio Communication

1. Regularly take part in an activity involving in a method of radio communication. You should use the time to learn a variety of techniques and recording activity and develop your skills
2. Demonstrate a radio communication method to a group of young people
3. Talk about the rules or codes of practice for radio communication and how to use equipment responsibly
4. Share your knowledge of radio communication alphabets and internationally recognised call signs and signals



Option 4: Electronics

1. Regularly take part in an activity involving electronics. Use the time to learn a variety of techniques and equipment and improve your skills
2. Show and explain your project work in electronics to a group of young people. You're not expected to play the role of an instructor and an appropriate adult should supervise your group
3. Discuss the safe working practices of electronics and how to use equipment responsibly
4. Demonstrate a detailed knowledge of circuits, components and the symbols used in electronics



Option 5: Astronomy

1. Regularly take part in an astronomy activity. Use a variety of instruments, record your observations over a period of time and show improvement in your skills
2. Demonstrate your skills in astronomy, including recording and observation, to a group of young people
3. Learn the meaning of technical astronomical terms. Give a detailed description of our galaxy and solar system, including planets and other bodies
4. Demonstrate a good knowledge of the history of space exploration since 1969



Explorer Scout use only: (tick when completed, for your records only)

No. 1	No. 2	No. 3	No. 4