



## Space Exploration Merit Badge at Riverbend Park

Welcome to the **Space Exploration** Merit Badge program at Riverbend Park. The program may be held at either the Riverbend Visitor Center located at 8700 Potomac Hills Street in Great Falls, or the Riverbend Nature Center located at 8814 Jeffery Road. Please review your confirmation email or call the park at 703-759-9018 for location.

### **Important general Merit Badge information for parents:**

Be sure that you are familiar with the requirements for the merit badge your scout has selected. Some badges may take considerable time and planning to complete and may not be appropriate for younger scouts. Blue cards must be signed by your Troop Leader prior to attending the merit badge class. Park staff will not sign off on any blue cards missing this signature.

Most merit badges are not designed to be completed in a single session with an instructor, so it is not always possible to walk away with a completed and signed blue card at the end of a program. Every badge requires some independent work by your scout.

FCPA-Riverbend Park will provide staff, meeting BSA Youth Protection guidelines for male and female scouts, and supervision ratios. Parent/guardian **MUST** sign-in, and sign-out each participant(s) from the class. If you provided your own transportation, you may sign-in and sign-out yourself from the class. There is no fee if adults wish to stay during the class.

### **Below is the recommended homework to be completed before the program:**

There are some useful links at the end of some questions; however, scouts are encouraged to find their own sources (library, internet etc.).

Merit badge worksheets may be downloaded from [meritbadge.org](http://meritbadge.org) and brought to class. These worksheets help scouts organize their homework and classwork.

### **5. Do the following:**

- a.** Discuss with your counselor a robotic space exploration mission and a historic crewed mission. Tell about each mission's major discoveries, its importance, and what was learned from it about the planets, moons, or regions of space explored.
- c.** Design a robotic mission to another planet or moon that will return samples of its surface to Earth. Name the planet or moon your spacecraft will visit. Show how your design will cope with the conditions of the planet's or moon's environment.

7. Design a living-habitat base located within our solar system, such as Titan, asteroids, or other locations that humans might want to explore in person. Make drawings or a model of your base. In your design, consider and plan **for the following:**
- a. Source of energy
  - b. How it will be constructed
  - c. Life-support system
  - d. Purpose and function

**What to bring to the program:**

- Bring your completed homework. It is OK if you cannot complete the homework before class. You can bring completed homework in at a later date for sign-off.
- Come prepared to discuss and present your homework. As we move from one topic to the next during class, scouts will be asked to present homework elements completed. It will be more important to prove that you have understood a requirement orally rather than just presenting written information.
- Bring your blue card signed off by your Troop Leader. (Riverbend does not have blue cards.)
- Bring/wear weather appropriate clothing/outerwear. We will not go outdoors in heavy rain or thunderstorms. Boy Scout uniform not required.
- Bring a pencil and pen.
- Bring a flashlight, if the program is held after dusk.
- Download the merit badge worksheets from [meritbadge.com](http://meritbadge.com) and bring these worksheets to class.
- Bring a snack and drink. Bring more substantial food if your program is longer than four hours.

**Work completed after the program:**

During the program, the merit badge counselor will do a demonstration or explain the process for completing the final merit badge requirements. Your scout must provide evidence of completion in order to obtain blue card sign-off. Digital photographs of your scout doing the element and a picture of the completed requirement will be sufficient evidence, unless otherwise stated.

If your scout needs blue card sign-off after the class date, please call 703-759-9018 to arrange a time to meet with a merit badge counselor.

We're looking forward to working with your scout.

Briget McArdle  
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8700 Potomac Hills Street  
Great Falls, VA 22066  
<http://www.fairfaxcounty.gov/parks/riverbend-park/>