

Mayflower Council

2019 Merit Badge University

March 2nd & 9th Southeastern Regional Vocational Technical High School

Merit Badge Pre-Class Requirements as of February 8, 2019

The following pages contain the pre-class requirements for this year's Merit Badge University classes. Note: In some cases counselors did not provide any requirements.

Note: Due to Mayflower Council Personal Information Confidentially policies, councilor names are not included in this document. Each councilor will be sent a roster of all scouts in their respective classes and may reach out with additional information.

IF YOU HAVE QUESTIONS ABOUT ANY REQUIREMENT PLEASE DO NOT EMAIL THE MERIT BADGE UNIVERSITY MAILBOX. WE DO NOT HAVE EITHER THE KNOWLEDGE OR ABILITY TO RESPOND. WE ARE ALSO PROHIBITED FROM REALEASING CONTACT INFORMATION FOR COUNSELORS OR VOLUNTEERS.

Merit Badge	Prerequisites
Architecture	No prerequisites
Art	1- Print out the Art Merit Badge Workbook and bring to Class (http://www.MeritBadge.org)
	2- To fulfill Requirement 6, with your parent's permission, visit a museum, art exhibit, or art gallery and write on worksheet what you learned. Must be completed before last day of MBU for credit. If you are unable to attend a show, the councilors will show some of their professional work for discussion in class to fulfill this requirement.
	3- Bring a favorite object to class and we will render in 4 different ways (pencil, charcoal, pastels, watercolor) Make sure it is not too detailed or complex as we have limited time in class to complete.
	4- Please bring \$1 for an Art material fee as the materials will be provided for you. (to be collected before or after first class)
Auto Maintenance	No prerequisites, we will assign homework.
Aviation	No prerequisites
Bird Study	Notebook w/ pen and pencil,
	Binoculars if already owned,
	Bird field guide if already owned
	Weather permitting be prepared to walk outside. (If this is permitted by BSA and council.)
Bugling	 Bring either a Bb Trumpet or Scout/Military modern G Bugle - I will be teaching the class in the key of G which will make it easier for the Scouts to play and keep them from tiring out through the long day. Do not bring a pocket trumpet as they are usually poor quality and harder to play Do not bring a "replica" civil war bugle as these are often poor quality and are not in the correct
	key. Here is an example of a decent quality affordable G Bugle (I own one) if they are looking to make a purchase (not required) http://www.scoutbugle.com/Centennial.htm
	4) Get familiar with the basic bugle calls and practice them between now and MBU. Do not wait until the class to "learn the calls". We will certainly work on them more and hopefully perfect them, but this is something that can and should be done in advance. They can find the requirements for the badge with links to each of the songs below (written music and mp3 files) at http://usscouts.org/usscouts/mb/mb032.asp
	 First Call Reveille Assembly Mess Call (meal time) To the Colore
	 To the Colors Retreat Taps

Merit Badge	Prerequisites
	These will be the main calls to learn. There are about 8 more that we will review so that they know what each is used for, however these 7 are what i will test them on for the badge.
Chemistry	There are no formal prereqs for the chemistry merit badge. However, in order to ensure the merit badge is completed by the end of MBU it would be wise if scouts completed the following requirements at home. #1: parts A, B, D #4: part B #5 #6 #7 choosing part A, B, C, or D.
Chess	Scouts should bring their own chess sets. It doesn't have to be fancy but it should be complete.
Cit in the Community	 2a. Bring a map of your community. Often you can find one on-line that you can print out. It should have enough roads labeled so that you can clearly identify areas of town to locate specific buildings upon it. 2b. Bring a print-out of all the town boards/committees/officials. Often you can find one on your town's website or by contacting the Town Clerk's office. You will need this list to create your organizational chart. As such, make sure you know which of those town boards/committees/officials are either elected or appointed (and why whom).
	3a. Attend a meeting in your town as described in the MB requirements. It would be acceptable to watch such a meeting via your local access cable or the internet if your viewing was focused and you took diligent notes. If you attend the meeting, have someone from the meeting simply sign a copy of the meeting's agenda (or other note) to indicate you attended. If you watch the meeting at home, bring a note from a parent to document that you watched it.
	4a. Choose an issue in your community that is important to you and begin your research. The organizational chart you are going to create for requirement 2b will be a big help with this research!
	7a. Choose an organization in your community that helps the community and that you feel is worth your time and effort to assist.
Cit in the Nation	Cit Nation students should complete Requirement 2 & 3 prior to March 2.

Merit Badge	Prerequisites
Cit in the World	 We want scouts to document the requirements on BSA CIT worksheets https://meritbadge.org/wiki/images/0/09/Citizenship_in_the_World.pdf We expect each scout to have the merit badge book or have downloaded it for reading and reference https://filestore.scouting.org/filestore/Merit_Badge_ReqandRes/Citizenship_in_the_World.pdf Requirements done for day one of class Plan on no internet access during the course for work Req. 1 Have the work/knowledge done to lead the topic Req. 3 A+B as these are detailed questions that the scout will not have access to during the course, and we do not want then doing this work during class discussions. Req. 7 as these are detail questions that the scout will not have access to during the course, and we do not want then doing this work during class discussions. Req. 7 as these are detail questions that the scout will not have access to during the course, and we do not want then doing this work during class discussions. Req. 7 as these are detail questions that the scout will not have access to during the course, and we do not want then doing this work during class discussions. Usually, I have the scout present one of his choices to the group in 2-3 minutes.
Climbing	No prerequisites
Collections	 Prepare a short written report or outline for your counselor, giving a detailed description of your collection*, including a short history. Be sure to include why you chose that particular type of collecting and what you enjoy and have learned from your collection. Discuss with your counselor at least 10 terms commonly used in your collection and be prepared to discuss the definition of each. (write list) Show your counselor any two groups from your collection. Explain how you organized your collection and why you chose that method. (Note: if your collection is too large to transport and your counselor is unable to view your collection directly, photographs should be available to share.) Find out about career opportunities in collecting. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you. Since Stamp Collecting and Coin Collecting are separate badges, those collections are not allowed for the Collections badge.
Communications	Please complete the following Communications merit badge requirements prior to class 2A or 2B, 5, 6 and 8
Cooking	No prerequisites
Crime Prevention	No pre-requisites. There will be a field trip. The counselor will email details when they are available.
Digital Technology	Scouts should come to the first session prepared to discuss requirements 2a - b, 3d-e, 4a, 4c There will be homework between sessions to do 3a - c, 4b, 5b-c, 6, 7c, 8a, 9a-b.

Merit Badge	Prerequisites
Disability Awareness	 #2a) find out what Independent Living Center serves their community - https://www.masilc.org/membership/cils #2b) find out about the Independent Living Center #2c) Learn about opportunities its members have #4) take notes about their location that hosts their scouting meetings and how the accessibility is for people with disabilities - we will take a walk in the building during the second part of the mbu to look at different architectural access features and possible barriers to people with disabilities #5) bring a list of myths and misconceptions about people with disabilities
Electricity	No prerequisite Requirements
Electronics	Welcome to the wonderful world of electronics! The scouts will learn in this Merit Badge: How electronic components work.
	C They will learn what each component can do.
	They will learn how to solder electronic parts.
	They will build an electronic's kit.
	But, most of all they will have a lot fun!
	Scott Ames is a graduate of Northeastern University B.S Electrical Engineering program and will be teaching this session.
	The kids will learn about electronics in these coming weeks and I will be forwarding tutorials in the weeks coming in future emails. The kids will need to buy and assemble an electronic kit from Amazon. This is the kit that I recommend buying. At the time I am writing this email, the Amazon price is showing as \$14.87
	http://www.amazon.com/gp/product/B0009Z3JJA/ref=oh_aui_detailpage_o00_s00?ie=UTF8&psc=1
	PLEASE ORDER THIS AS SOON AS POSSIBLE! These kits can take a couple of weeks to arrive The kit should take about 3 to 4 hours to complete.
	The Amazon description of a robot is incorrect, it is actually an alarm. I feel this is an excellent choice as it not only consists of an easy-to-assemble electronic alarm circuit, but the kit comes with a soldering iron , solder and all the tools they need to assemble the kit. It also teaches them how to solder and even provides practice space on the circuit board to use until they are confident enough to tackle the actual circuit.
	For those who may already have a soldering iron and tools, the same kit can be ordered without the iron and tools for \$11.99 at this address: http://www.amazon.com/gp/product/B0002LUAL6/ref=oh_aui_detailpage_o00_s00?ie=UTF8&psc=1
	The solder that comes with the kit is not that good. I would strongly recommend buying the good solder. It is not necessary but nice to have. It will make the assembly of the kit go much easier.

Merit Badge	Prerequisites
	The Amazon Price is: \$2.66 https://www.amazon.com/Kester-83-4000-0000-Solder-Pocket-Diameter/dp/B00068IJNQ/ref=sr_1_fkmr0_3?s=hi&ie=UTF8&qid=1482891614&sr=1-3-fkmr0&keywords=Pocket+Pack+Solder+60%2F40+0.031+0.71+oz.+TubeI am including a link on what we will cover for the first class. This video covers basic Electronic components and it can be found here. It is a nice to watch but not required because we will be covering this in class: https://www.youtube.com/watch?v=f3uip7lvyPMBest of luck and hope you enjoy the Electronics Merit Badge!
	Thank you
Emergency Prep	For the 1st week: 1, 2a, 2b, 2c For the 2nd week: 6b, 6c, 7b, 8b, 9 When in doubt do more.
Engineering	 Pre-Work All Prework should be completed before arriving to MBU (if not it cannot be signed off) Any prework not done will have to be done later and approved at a later date Scouts should have a copy of the Engineering merit badge book Scouts should have a blue card opened in Scoutbook – see your advancement coordinator Before MBU Please work on the following requirements: Requirement 1:
	 Investigate how an item in your home works and why Find out what kind of engineering activities were needed to create it Bring a minimum 1 page set of notes with your findings and any questions to MBU (pictures/sketches are even better) Requirement 2:
	 Bring a 1 page summary of the engineering achievement you researched Requirement 3: Bring a 1 page summary explaining the 6 types of engineers and how two of them have interrelated work Requirement 5: Complete one of the 2 options and bring a 1 page summary, drawings, or models to MBU Requirement 6: Bring a list of 10 Electrical devices in your home

Merit Badge	Prerequisites
	 Rated Watts, Amps, Voltage (usually on a tag on the device or on the power supply) Cost of electricity – usually on the electric bill in \$/KWh, There is also a supply charge, so that would be interesting as well.
	Requirement 8:
	Bring a 1 paragraph summary
	Requirement 9:
	• Bring your questions about engineering as a career so we can discuss them
	Remaining requirements will be done at MBU
Environmental Science	Scouts will have to do the following requirements (prerequisites) on their own and pass them in at the end of MBU if they want to finish the badge during MBU:
	1, 3c, 3e, 3f, 4, 5, 6
	all the other requirements, we can complete in the allotted class time. Of course, I will review all the requirements so they understand them. We may be able to do more of them in class if time permits.
Family Life	There are no prerequisites for Family Life.
	However, Scouts can get a head start on the 90 day chore chart (Req. 3) with Merit Badge Counselor approval of their chores before the start of MBU. They need to provide at least 5 chores, a combination of daily and weekly activities. Chore charts with a start date prior to MBU without MBU Merit Badge Counselor approval must have written approval from the Troop Advancement Chair.
	Scouts can also get approval from a parent for the Individual Project (req 4) and Family Project (reg 5) but need Merit Badge Counselor approval before beginning the project.
	This information can be sent to Mrs. Olson at maryfranolson@gmail.com with a parent copied if sent from the Scout email account.
First Aid	Requirement # 5 - Prepare a first-aid kit for your home. Bring the kit to your 1 st class.
Fly Fishing	 The pre reqs. for Fly Fishing M.B. 1. A fly rod with correct line and fly reel. 2. A tapered fly line leader. 3. If at all possible a fly tying vise with bobbin and dubbing needle. 4. Ability to cast a spinning or bait casting rod with some accuracy
	We can provide a few vises and tools etc. as well as hooks and tying materials.
Genealogy	#4b Obtain at least one genealogical document that supports an event that is or can be recorded on your pedigree chart.

Home Repairs 1. Do the following: a. Explain to your counselor the most likely h working on home repairs and what you shou and respond to these hazards. Describe the should be used when working on home repa b Discuss general precautions related to hom practices that every home repairer should ex Journalism FOR FIRST SESSION Requirement #2: On the same day, read a local newspape and an online news source. Clip/copy, read and compare prepared to discuss in class. OR On the same day, watch a and listen to a radio newscast and view a national broadc compare the amounts of time devoted to each story in class.	 appropriate safety gear and clothing that airs. me repairs. Name at least 10 safe kercise. er, a national newspaper, a newsmagazine a story about the same subject. Be a local newscast and a national newscast cast news site online. Be prepared to
working on home repairs and what you shou and respond to these hazards. Describe the should be used when working on home repai b Discuss general precautions related to hom practices that every home repairer should exJournalismFOR FIRST SESSIONRequirement #2: On the same day, read a local newspape and an online news source. Clip/copy, read and compare prepared to discuss in class. OR On the same day, watch a and listen to a radio newscast and view a national broadd compare the amounts of time devoted to each story in class.	 appropriate safety gear and clothing that airs. me repairs. Name at least 10 safe kercise. er, a national newspaper, a newsmagazine a story about the same subject. Be a local newscast and a national newscast cast news site online. Be prepared to
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FOR SECOND SESSION	
Requirement #3: Write a hard news article or a feature ar media) about a current event or an unusual event that int Interview someone in the community who is influential a OR Read a biography of a journalist and write an article al and write a 200-word article about it.	terests you. Bring the article to class. OR nd present an oral or written report in class.
Requirement #4: Attend a public event and do one of the it using the inverted pyramid style and the chronological story and a feature story about the event. OR Tazke a series Bring photos to class.	style. OR Use radio/TV style to write a news
Requirements #1, #2 (visit), #3 (hard news and feature stowithin classes.	ories; the 5 "Ws"), and #5 will be covered
Law Complete requirements 2 & 3 before March 2 & 9.	
Model Design No prerequisite Requirements	
Music No prerequisite Requirements	
Nuclear Science For the nuclear science merit badge, the prerequisites wil 2a, and 3b either in the Nuclear Science Merit Badge Pamphlet (https://www.scoutshop.org/catalog/product/view/id/53 or by other means of research and write their findings on Worksheet (https://meritbadge.org/wiki/images/f/fa/Nuclear_Science MBU.	343) h the Nuclear Science Merit Badge
Oceanography No prerequisites	

Merit Badge	Prerequisites
Personal Fitness	No prerequisites
Personal Manage	In order for the boys to complete the badge in a timely manner they need to complete requirement 2., 9 and 10.
	 Do the following: a. Prepare a budget reflecting your expected income (allowance, gifts, wages), expenses, and savings. Track and record your actual income, expenses, and savings for 13 consecutive weeks. (You may use the forms provided in this pamphlet, devise your own, or use a computer generated version.) When complete, present the records showing the results to your merit badge counselor. b. Compare expected income with expected expenses. If expenses exceed income, determine steps to balance your budget. If income exceeds expenses, state how you would use the excess money (new goal, savings).
	 9. Prepare a written project plan demonstrating the steps below, including the desired outcome. This is a project on paper, not a real-life project. Examples could include planning a camping trip, developing a community service project or a school or religious event, or creating an annual patrol plan with additional activities not already included in the troop annual plan. Discuss your completed project plan with your merit badge counselor. a. Define the project. What is your goal? b. Develop a timeline for your project that shows the steps you must take from beginning to completion. c. Describe your project. d. Develop a list of resources. Identify how these resources will help you achieve your goal. e. Develop a budget for your project.
Pets	 PREREQUISITE - Due March 2, 2019 1. <i>Requirement 1</i> - Bring evidence of taking care of pet for 4 months. A form has been provided for your parent/guardian to sign off on. Bring in a picture of you and your pet (printed please). 2. <i>Requirement 3</i> – Bring in the pamphlet/book for your pet's care. Your book/pamphlet must be approved. Read your approved pets literature.
Photography	 Be sure to get a copy of the Photography Merit Badge pamphlet (2016 printing) and READ IT! 2016 printing is important - the requirements have changed. Be especially familiar with requirements 1 through 3 before you arrive. The Cyber Chip is a requirement for this merit Badge (1b). Please bring your valid Cyber Chip certificate with you to the session or a printed email from your Advancement Chair or Scoutmaster stating your Cyber Chip is current. Bring a camera with you to the session on Saturday, March 2rd. Ideally, this camera is one which you are able to change settings (telephoto/wide, shutter speed or aperture/F-Stop) Be sure to fully charge your camera batteries. If you have spare batteries, bring them too. Please bring a notebook and pen to take notes.

Merit Badge	Prerequisites
Programming	The overall requirements for the Programming merit badge are here: https://filestore.scouting.org/filestore/Merit_Badge_ReqandRes/Programming.pdf However, to complete the badge within the MBU timeframe, you'll need to complete these items before the first class: 1. You must already have the requirements for your "Cyber Chip" card complete, along with a signed Cyber Chip card from your Scoutmaster. a. More details about the Cyber Chip are here: https://www.scouting.org/training/youth- protection/cyber-chip/ b. And the form your can sign with your parents and Scoutmaster is here: https://filestore.scouting.org/filestore/youthprotection/pdf/100-055_WB.pdf 2. Research these topics, print out some references, and be prepared to discuss all of them (and show your work) in the first class: a. History of programming and how programming languages have evolved over time. b. Create a list of 10 programming languages that are in use today, and in what scenarios or industries each language is used. c. Describe three different devices you use each day that have software in them (are programmed) d. Find out about 3 different roles or jobs that require knowledge of Programming. (They don't have to be Software jobs specifically.) Describe what kind of education or training are required.
Public Speaking	Bring to class are a pen and the merit badge book for public speaking
Radio	The counselor will email requirements and other materials to scouts.
Reptile and Amphibian	No prerequisites or field trips for reptile and amphibians
Robotics	Scouts complete requirements 6 and 7 prior to the MBU if they want to get signed off on the final day. We will not be going over these in class so we can concentrate more on the practical hand-on requirements for the Merit Badge.
Space Exploration	No prerequisites
Sports	No prerequisites
Sustainability	 Before starting work on any other requirements for this merit badge, write in your own words the meaning of sustainability. Explain how you think conservation and stewardship of our natural resources relate to sustainability. Have a family meeting, and ask family members to write down what they think sustainability means. Be sure to take notes. You will need this information again for requirement 5. WATER: Develop and implement a plan that attempts to reduce your family's water usage. Examine your family's water bills reflecting usage for three months (past or current). As a family, choose three ways to help reduce consumption. Implement those ideas for one month. Share what you learn with your counselor, and tell how your plan affected your family's water usage. FOOD: Develop and implement a plan that attempts to reduce your household food waste. Establish a baseline and then track and record your results for two weeks. Report your results to your family and counselor. ENERGY: Develop and implement a plan that attempts to reduce consumption for one of your family's household utilities. Examine your family's bills for that utility reflecting usage for three

Merit Badge	Prerequisites
	 better steward of this resource. Implement those ideas for one month. Share what you learn with your counselor, and tell how your plan affected your family's usage. STUFF: Keep a log of the "stuff" your family purchases (excluding food items) for two weeks. In your log, categorize each purchase as an essential need (such as soap) or a desirable want (such as a DVD). Share what you learn with your counselor.
Theater	 Please have the Scouts print and complete the multiple choice quiz attached to this email and turn it in at the first session. Each Scout should prepare a campfire skit and turn in a script at the first session. Each Scout should prepare a review of two different plays or movies. Each review should include comments on the story, acting, and staging of the show. Name: Theater Terms NOTE: There are more definitions than answers!!
	BSA Unit:

Merit Badge	Prerequisites
Traffic safety	All scouts must read the Traffic Safety pamphlet completely before the March 2 sessions. The scout will answer completely the BYU requirement worksheet which before the March 2 sessions.
	The Requirement 5 worksheet should be completed and turned in on March 9.
	TRAFFIC SAFETY MERIT BADGE
	Scout Requirement: Interview the Traffic Safety Officer (or the Police
	Commander) at your police department. Please request and attach that officer's
	business card to this work sheet.
	NAME & RANK:••.
	AGENCY:
	What are the 3 biggest traffic safety problems in your community?
	What is the agency doing to address these traffic safety concerns
Welding	Work boot's No sneaker or rubber shoes No contact lens No nylon pants or shirt
Wood Working	A. Explain to your counselor the most likely hazards you may encounter while participating in woodwork activities and what you should do to anticipate, help prevent, mitigate and respond to these hazards explain what precautions you should take to safely use your tools.
	B. Show that you know first aid for injuries that could occur while woodworking including splinters, scratches, Cuts, severe bleeding and shock. Tell what precautions must be taken to help prevent loss of eyesight or hearing and explain why and when it is necessary to use a dust mask.
	Bring in written answers and bring totin chip, badge and car
	Note: Your counselor will be contacting you via email with additional information.