

Prerequisite Catalog for Eastern Michigan University 2026

For ALL merit badges offered Scouts should read the full merit badge pamphlet and be prepared to discuss, explain and demonstrate all material. Workshops offered will feature EMU faculty, industry experts and qualified merit badge counselors who will facilitate each session, however scouts need to **actively participate** in order to complete all work and be awarded a signed blue card.

It is highly suggested that scouts wanting to complete Eagle Scout merit badges (identified with an *) are already at First Class rank or higher. These badges have a certain level of complexity and maturity required in order for the work to be completed.

For any merit badge that requires a scout to reach out to the expert, a scout MUST cc a second adult!

Below is a listing of each merit badge and pre-work that should be done in order to leave with a complete merit badge. *Simply attending the workshop will not result in a signed blue card.*

AMERICAN BUSINESS

- <https://www.scouting.org/merit-badges/american-business>
- Read merit badge pamphlet in full
- Req 5: Choose a business and research how it applies to each of the primary areas of business (accounting, finance, economics, marketing, and management). Share what you have learned with your counselor.
- Req 6 (a or b)
 - (a) Choose one of the primary areas of business and identify three career opportunities. Select one and research the education, training, and experience required for this career. Discuss this with your counselor and explain why this interests you.
 - (b) Select a business leader and interview this individual to learn more about his or her company and career path. Discuss the role ethics plays in making business decisions. Share what you have learned with your counselor.

AMERICAN CULTURES

- <https://www.scouting.org/merit-badges/american-cultures>
- Read merit badge pamphlet in full
- Per the requirements Choose THREE groups that have different racial, cultural, national, or ethnic backgrounds, one of which comes from your own background. Use these groups to meet requirements 1, 2, and 3.
- Req 1. Do TWO of the following, choosing a different group for each.
 - (a) Go to a festival, celebration, or other event identified with one of the groups. Report on what you see and learn.
 - (b) Go to a place of worship, school, or other institution identified with one of the groups. Report on what you see and learn.
 - (c) Talk with a person from one of the groups about the heritage and traditions of the group. Report on what you learn.
 - (d) Learn a song, dance, poem, or story that is traditional to one group, and teach it to a group of your friends.

- (e) Go to a library or museum to see a program or exhibit featuring one group's traditions. Report on what you see and learn.
- Req 5. Give a talk to your Scout unit or class at school on how people from different groups have gotten along together. Lead a discussion on what can be done to help various groups understand one another better. *NOTE: If a scout is prepared, this may be able to be accomplished during the workshop.*

ARCHITECTURE

- <https://www.scouting.org/merit-badges/architecture/>
- Read merit badge pamphlet in full
- **None**

ART

- <https://www.scouting.org/merit-badges/art/>
- Read merit badge pamphlet in full
- 5. Do ONE of the following:
 - (a) Design something useful. Make a sketch or model of your design. With your counselor's approval, create a promotional piece for the item using a picture or pictures.
 - (b) Tell a story with a picture or pictures or using a 3-D rendering.
 - (c) Design a logo. Share your design with your counselor and explain the significance of your logo. Then, with your parent or guardian's permission and your counselor's approval, put your logo on Scout equipment, furniture, ceramics, or fabric.

ARTIFICIAL INTELLIGENCE

- *This workshop will be facilitated by faculty at EMU!*
- <https://www.scouting.org/merit-badges/artificial-intelligence/>
- Read merit badge pamphlet in full
- **NOTE TO SCOUTS:** The Artificial Intelligence (AI) merit badge has no merit badge pamphlet. Instead, it has been designed for you to interact with the Scoutly chatbot on your learning journey as you work through the requirements. Scoutly can be found on the bottom right of your browser at <https://scouting.org>. If you have a question about a requirement, ask Scoutly! Hint: try asking Scoutly to Explain the "xxx" activity for requirement "yy" of the AI merit badge. This does not replace the requirement to identify and work with a counselor to complete the badge. Additional educational resources will be available on our Counselor Information Page.
- *Scouts **NEED** to do the reading, research and be prepared to discuss this merit badge as most of the requirements read "Do the following and share what you learned with your counselor."*
- Req 1. Define the following terms and share the meaning of each with your counselor: artificial intelligence (AI), artificial intelligence agents, automation, basic programming, bots, data, databases, digital workers, general AI, machine learning (ML), narrow AI, superintelligent AI, tasks, triggers, workflows, and variables.

CHEMISTRY

- *This workshop will be facilitated by faculty at EMU and be completed in the lab!*
- <https://www.scouting.org/merit-badges/chemistry/>
- Read merit badge pamphlet in full

- If possible please complete Chemistry in the Kitchen (Requirement 3) and bring documentation for the merit badge counselor.
- 3. After successfully completing requirement 1, do EACH of the following:
 - a. Perform a Maillard, or browning, reaction. Discuss with your counselor whether a physical or chemical change has occurred, and what happened to molecules in the food during the cooking process.
 - Here is an explanation of what you will need to do: [What is the Maillard Reaction - Food Science](#)
 - b. Prepare and use a red cabbage indicator to measure the pH of five common household liquids, including water. Discuss your observations with your counselor.
 - Some easy instructions can be found here: <https://www.acs.org/education/activities/red-cabbage-indicator.html>
 - There is a downloadable PDF version with a table to fill out to bring for verification.

***CITIZENSHIP IN THE NATION**

- <https://www.scouting.org/merit-badges/citizenship-in-the-nation/>
- Read merit badge pamphlet in full
- 7. Do TWO of the following:
 - A. Visit a place that is listed as a National Historic Landmark or that is on the National Register of Historic Places. Tell your counselor what you learned about the landmark or site and what you found interesting about it.
 - B. Tour your state capitol building or the U.S. Capitol. Tell your counselor what you learned about the capitol, its function, and the history.
 - C. Tour a federal facility. Explain to your counselor what you saw there and what you learned about its function in the local community and how it serves this nation.
 - D. Choose a national monument that interests you. Using books, brochures, the internet (with your parent's permission), and other resources, find out more about the monument. Tell your counselor what you learned, and explain why the monument is important to this country's citizens."
- 8. Name your representatives in the United States Congress. Write to your representative in Congress explaining your views on a national issue. Show your letter, along with any response you receive, to your counselor.

***CITIZENSHIP IN THE WORLD**

- <https://www.scouting.org/merit-badges/citizenship-in-the-world/>
- Read merit badge pamphlet in full
- 7. Do TWO of the following (with your parent or guardian's permission) and share with your counselor what you have learned:
 - (a) Visit the web site of the U.S. State Department. Learn more about an issue you find interesting that is discussed on this web site.
 - (b) Visit the web site of an international news organization or foreign government, OR examine a foreign newspaper available at your local library, bookstore, or newsstand. Find a news story about a human right realized in the United States that is not recognized in another country.
 - (c) Visit with a student or Scout from another country and discuss the typical values, holidays, ethnic foods, and traditions practiced or enjoyed there.

- (d) Attend a world Scout jamboree.
- (e) Participate in or attend an international event in your area, such as an ethnic festival, concert, or play.

COLLECTIONS/COIN COLLECTING

- <https://www.scouting.org/merit-badges/collections/>
- Read merit badge pamphlet in full
- Requirement 1. Prepare a short written report or outline for your counselor, giving a detailed description of your collection, including a short history, why you enjoy your collection, and what you have learned from collecting. Be sure to include why you chose that particular type of collection/collecting method.
- Bring documentation or parts of your collections as they relate to the merit badge.

Scouts can also earn Coin Collecting during the session provided they bring their coin collections and complete the pre-work.

- <https://www.scouting.org/merit-badges/coin-collecting/>
- Requirement 4 - Bring your collected coins

CYBERSECURITY

- *This workshop will be facilitated by faculty at EMU*
- Read merit badge pamphlet in full
- <https://www.scouting.org/merit-badges/cybersecurity/>
- 1(a) View the [Personal Safety Awareness "Digital Safety" video](#) (with your parent or guardian's permission).
- 4(b) Pick one type of malware (such as virus, worm, Trojan, backdoor, spyware, or ransomware) and find out how it works. Explain what it does and the harm it can cause.
- 4(e) Choose to complete one option (1) or (2)
- 4(f) Create a list of what is part of your cyber attack surface including all the ways someone could try to access your personal information or devices—such as online accounts, apps, or home networks.
- 5(c) System security. With your parent or guardian's permission, do THREE of the following using a computer or mobile device, and discuss with your counselor.
- 6(a) Research and explain to your counselor three situations where encryption is used in cybersecurity. For each situation, describe what kind of encryption is used and why it is important.
- 6(c)(2) Download and set up an app (from an official app store) that uses end-to-end encryption. Explain to your counselor what this means, how it works, and why it is more secure than other forms of communication (e.g. SMS).
- 9(a) Identify three career opportunities that would use skills and knowledge in cybersecurity. Pick one and research the training, education, certification requirements, experience, and expenses associated with entering the field. Research the prospects for employment, starting salary, advancement opportunities and career goals associated with this career. Discuss what you learned with your counselor and whether you might be interested in this career.

DENTISTRY

- <https://www.scouting.org/merit-badges/dentistry/>
- Read merit badge pamphlet in full
- Requirement 3. Arrange for a visit with a dentist. Before you go, ask whether your visit can include a dental examination and a plaque-control demonstration. Afterward, ask questions about things you want to know. Then tell your counselor what the dentist does during a checkup examination.
- Requirement 4(c) Keep a record of everything you eat for three days. Circle those items that may provide the sugars that bacterial plaque needs to make acid. List snacks that you should avoid to help maintain the best oral health.
- Requirement 7. Identify three career opportunities that would use skills and knowledge in dentistry. Pick one and research the training, education, certification requirements, experience, and expenses associated with entering the field. Research the prospects for employment, starting salary, advancement opportunities and career goals associated with this career. Discuss what you learned with your counselor and whether you might be interested in this career.

DOG CARE

A dog will be used for demonstration needs during the workshop

- <https://www.scouting.org/merit-badges/dog-care/>
- Read merit badge pamphlet in full
- 1(c) give a short history of one breed.
- 4. For two months, keep and care for your dog.* Maintain a log of your activities during this period that includes these items: feeding schedule, types of food used, amount fed, exercise periods, training schedule, a weekly body weight record, grooming and bathing schedules, veterinary care, if necessary, and costs. Also include a brief description of the type of housing/shelter arrangements you have for your dog.
- 8. Visit a veterinary hospital or an animal shelter and give a report about your visit to your counselor.
- 9. Know the laws and ordinances involving dogs that are in force in your community.

ENTREPRENEURSHIP

- [Entrepreneurship Merit Badge | Scouting America](#)
- Read merit badge pamphlet in full
- 3. Identify and interview an individual who has started a business. Learn about this person's educational background, early work experiences, where the idea for the business came from, and what was involved in starting the business. Find out how the entrepreneur raised the capital (money) to start the business, examples of successes and challenges faced, and how the business is currently doing (if applicable). Discuss with your counselor what you have learned.
- 4. Think of as many ideas for a business as you can, and write them down. From your list, select three ideas you believe represent the best opportunities. Choose one of these and explain to your counselor why you selected it and why you feel it can be successful.

GENEALOGY

- <https://www.scouting.org/merit-badges/genealogy/>
- Read merit badge pamphlet in full
- *Scouts should consider bringing a personal smartphone, laptop, or tablet - This is encouraged, but not required.*
- 2. Do ONE of the following:
 - (a) Create a timeline for yourself or for a relative. Then write a short biography based on that time line.
 - (b) Keep a journal for six weeks. You must write in it at least once a week.
- 3. With your parent or guardian's help, choose a relative or a family acquaintance you can interview in person, by telephone, or by email or letter. Record the information you collect so you do not forget it.
- 4c. Obtain at least one genealogical document that supports an event that is or can be recorded on your pedigree chart or family group record.
- 4d. Tell how you found it and how you would evaluate the genealogical information you found for requirement 4c.
- 5. Contact ONE of the following individuals or institutions. Ask what genealogical services, records, or activities this individual or institution provides, and report the results:
 - (a) A genealogical or lineage society
 - (b) A professional genealogist (someone who gets paid for doing genealogical research)
 - (c) A surname organization, such as your family's organization
 - (d) A genealogical educational facility or institution.
 - (e) A genealogical record repository of any type (courthouse, genealogical library, state or national archive, state library, etc.)
- 6. Begin your family tree by listing yourself and include at least two additional generations. You may complete this requirement by using the chart provided in the Genealogy merit badge pamphlet or the genealogy software program of your choice."
- *At the end of the session, there will be a demonstration on fun ways to learn about family history using technology. With parental permission, download the Family Search app (free) and enter in as many family members as they are able (this also fulfills requirements 6 and 7).*

GRAPHIC ARTS

- <https://www.scouting.org/merit-badges/graphic-arts/>
- Read merit badge pamphlet in full
- Requirement 3. Design a printed piece (flyer, T-shirt, program, form, etc.). Explain your decisions for the typeface or typefaces you use and the way you arrange the elements in your design. Explain which printing process is best suited for printing your design. If desktop publishing is available, identify what hardware and software would be appropriate for outputting your design.
- Requirement 4 as it relates to your product!

LANDSCAPE ARCHITECTURE (messed)

- <https://www.scouting.org/merit-badges/landscape-architecture/>
- Read merit badge pamphlet in full
- Requirement 1. Go to a completed landscape project that a landscape architect has designed. Before you visit the site, obtain a plan of the design from the landscape architect if one is available.
- Requirement 3. Identify five shrubs, five trees, and one ground cover, being sure that you select examples of different shapes, sizes, and textures. With the help of your counselor or a local nursery, choose plants that will grow in your area. Bring pictures of the different planting materials or, if possible, examples of their branches, leaves, or flowers to a group such as your troop or class at school. Be prepared to tell how you might use each in the design of a landscape and the maintenance that would follow.

LEATHERWORK

- <https://www.scouting.org/merit-badges/leatherwork/>
- Read merit badge pamphlet in full
- To fulfil a shop visit, please reach out to the merit badge counselor Jeffrey Mangrum at HOF Designs (jeffreymangrum1973@gmail.com).
- 2. Explain to your counselor
 - (a) Where leather comes from
 - (b) What kinds of hides are used to make leather
 - (c) What are five types of leather
 - (d) What are the best uses for each type of leather
- 5. Do ONE of the following:
 - (a) Learn about the commercial tanning process. Report about it to your merit badge counselor.
 - (b) Tan the skin of a small animal. Describe the safety precautions you will take and the tanning method that you used.
 - (c) Recondition or show that you can take proper care of your shoes, a baseball glove, a saddle, furniture, or other articles of leather. Discuss with your counselor the advantages or disadvantages of leather vs. synthetic materials.
 - (d) Visit a leather-related business. This could be a leathercraft supply company, a tannery, a leather goods or shoe factory, or a saddle shop. Report on your visit to your counselor.

MINING IN SOCIETY

- *This workshop will be facilitated by faculty at EMU!*
- <https://www.scouting.org/merit-badges/mining-in-society/>
- Read merit badge pamphlet in full
- It is HIGHLY suggested that scouts prepare requirements 3, 4 and 8b. If possible creating typed responses that can be reviewed by the facilitator before the event. It is suggested that the written responses be between 250-500 words. Something short to show the scout has done some pre-work to better understand the content.
- Please email the document to chris.gellasch@emich.edu.
- Req 3. What are the potential hazards a miner may encounter at an active mine and the protective measures used by miners. In your discussion, explain how: (a) The miner's personal protective equipment is worn and used, including a hard hat, safety glasses, earplugs, dust mask

or respirator, self-rescue device, and high-visibility vest. (b) Miners protect their hands and feet from impact, pinch, vibration, slipping, and tripping/falling hazards. (c) Monitoring equipment warns miners of imminent danger, and how robots, drones, and other technology may be used in mine rescues.

- Req 4. What are the dangers someone might encounter at an abandoned mine or quarry.
- Req 8b. Find out about three career opportunities in the mining industry. 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.

RAILROADING

- <https://www.scouting.org/merit-badges/railroading/>
- Read merit badge pamphlet in full
- 2 a Do the following: Explain the purpose and formation of Amtrak. Explain, by the use of a timetable, a plan for making a trip by rail between two cities at least 500 miles apart. List the times of departure and arrival at your destination, the train number, and the type of service you want.

SALESMANSHIP

- <https://www.scouting.org/merit-badges/salesmanship/>
- Read merit badge pamphlet in full
- *It is suggested that scouts bring a laptop or tablet for use during the merit badge.*
- Requirement 3. Write and present a sales plan for a product and a sales territory assigned by your counselor.
- Requirement 5. Do ONE of the options.
- Requirement 7. Investigate and report on career opportunities in sales, then prepare a written statement of your qualifications and experience. Include relevant classes you have taken in school and merit badges you have earned.

SURVEYING

- *This workshop will be facilitated by faculty at EMU!*
- <https://www.scouting.org/merit-badges/surveying/>
- Read merit badge pamphlet in full
- 5. Get a copy of the deed to a piece of property approved by your counselor, from the local courthouse or title agency. Discuss with your counselor the different parts of the deed and their importance.

THEATER

- *This workshop will be facilitated by faculty at EMU and will be completed on the stage at EMU! This is an extensive workshop and will include more than the bare minimum from the merit badge.*
- <https://www.scouting.org/merit-badges/theater/>
- Read merit badge pamphlet in full
- Req 1: Bring your written review for the three plays watched or read. Be sure to include the play and a brief plot. If you chose to watch the plays, comment on the acting and the staging. **NOTE:** *Watching plays on television, video, or as a movie is no longer permitted.*

- Req 2: Write a one-act play that will take at least 10 minutes to perform. The play must have a main character, conflict, and a climax. **HINT:** *One-page-per-minute typed is a good rule. Plays with many short lines/long monologues will have different page counts. Non-dialogue action or stage directions can also affect the timing. If scouts have written something for school that may be considered or could be a starting point!*
- For Requirement 3 bring evidence of you fulfilling any requirements: photos, playbills, etc.

TRUCK TRANSPORTATION

- <https://www.scouting.org/merit-badges/truck-transportation/>
- Read merit badge pamphlet in full
- Requirement 4. Visit a truck terminal and complete items 4(a) through 4(e). After your visit, share what you have learned with your counselor.
- Requirement 8. (a-d) Assume that you are going to ship by truck 500 pounds of goods (freight class 65) from your town to another town 500 miles away. Your shipment must arrive within three days. Explain in writing:

VETERINARY MEDICINE

- <https://www.scouting.org/merit-badges/veterinary-medicine/>
- Read merit badge pamphlet in full
- Requirement 6. Do ONE of the requirements
 - 6(a). Visit a veterinary clinic, hospital, or veterinary referral teaching hospital that does work in one of the practices listed in requirement 1. Spend as much time as you can observing the veterinarians and their staff. Write a report on what you observed and learned at the facility. Share your report with your counselor.
 - 6(b). Spend as much time as possible with a veterinarian who works in one of the fields listed in requirement 2. Learn what special training beyond veterinary medical school may have been required for that position. Learn about any special or unusual activities required of this position. Write a report on what you have learned about this field of veterinary medicine. Include in your report how this field serves the needs of the general public. Share your report with your counselor.

ADULT TRAINING OPPORTUNITIES

Adult sessions will have a \$10 fee that includes a patch.

Merit Badge Counselor Training (AM or PM)

Merit Badge Counselor training is a program for registered adult volunteers in Scouting America who want to teach and guide Scouts in earning merit badges. The training provides an understanding of a counselor's role as a coach and mentor, how to effectively use the merit badge program to encourage learning, and the methods for counseling and coaching Scouts. It covers the purpose of the merit badge program and the counselor's responsibility in helping Scouts meet the requirements for various badges.

What Is A Unit Commissioner and Why Are They Important! (PM)

Discover the purpose of the Unit Commissioner and the vital role they play in supporting packs, troops, and crews. Learn how Commissioners coach leaders, connect units with resources, and help strengthen program quality.

Committee/Committee Chair Training (AM)

Complete this position-specific course for Committee Members and the Committee Chair. The session is designed to equip adult volunteers with the knowledge and skills needed to serve effectively on a unit (pack, troop, crew). The training ensures that committees can properly support the youth program and the direct-contact leaders.

Eagle Coach/Mentor Training (PM)

This session will prepare adult volunteers to become an Eagle Coach to mentor a scout through the process of earning Eagle Scout rank, particularly by assisting with the Eagle Scout Service Project. The training focuses on the role of the coach as a guide for the scout, explaining project requirements and best practices to help the scout succeed and to streamline the advancement process for both the scout and their unit leader.

Youth Mental Health First Aid Training (*All day with a \$30 surcharge*)

Youth Mental Health First Aid (YMHFA) training for Scouting America is a course for adults to learn how to identify, understand, and respond to young people (ages 12-18) who may be experiencing a mental health or substance use challenge or crisis. It equips leaders with skills to recognize common issues like anxiety, depression, and eating disorders, and provides an action plan (ALGEE) to help youth in both non-crisis and crisis situations. Scouting America is implementing this training to improve the mental well-being of its members and create a safer, more supportive environment.

The course covers:

- Common signs and symptoms of mental health challenges in this age group, including anxiety, depression, eating disorders and attention deficit hyperactive disorder (ADHD).
- Common signs and symptoms of substance use challenges.
- How to interact with a child or adolescent in crisis.
- How to connect the youth with help.
- Expanded content on trauma, substance use, self-care and the impact of social media and bullying.