

# 2025 Prerequisites for Western Gateway District Merit Badge University



## **General Notes**

## Registration for 2025 can be found here: <a href="https://scoutingevent.com/397-WGMBU">https://scoutingevent.com/397-WGMBU</a>

Be familiar with the requirements for the merit badge(s) that you have signed up for prior to coming to the Merit Badge University and be prepared to discuss all of them. It is strongly suggested that you buy the latest Merit Badge Pamphlet(s) for your merit badge(s) you are taking.

**NOTE:** If prerequisites are not done prior to class, you will receive a partial for the merit badge.

<u>IMPORTANT:</u> Remember only the prerequisites are listed here; there are other requirements that will be completed in the merit badge session.

Table of Contents	
GENERAL NOTES	1
TABLE OF CONTENTS	1
ARTIFICIAL INTELLIGENCE	3
AMERICAN LABOR	4
ANIMATION	4
<u>ARCHERY</u>	4
ART	5
CITIZENSHIP IN THE COMMUNITY	6
CITIZENSHIP IN THE NATION	9
CITIZENSHIP IN THE WORLD	
COLLECTIONS	12
DIGITAL TECHNOLOGY	12

ELECTRONICS	12
ENGINEERING	
FIRST AID	14
GENEALOGY	15
INDIAN LORE	16
INVENTING	
MUSIC	18
PERSONAL MANAGEMENT	19
PETS	21
PUBLIC SPEAKING	21
SCHOLARSHIP	22
TEXTILES	22

## **Artificial Intelligence**

Counselor: Nate Ransom

Session: Afternoon

Merit Badge Requirement Revision: 2025 Printing

**Official Pamphlet:** *Not Yet Available* 

**Requirements:** View

## Prerequisites: < Updates Coming - listed full requirements for now>

**Requirement 1.** Key Concepts. 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.

Requirement 2. Artificial Intelligence (AI) Basics. Do the following and share what you learned with your counselor:

- (a) Identify 10 examples of how AI is currently used in everyday life.
- (b) Identify 5 examples of how AI is currently used in the workplace.
- (c) Identify 5 examples of how AI can be used at school or in support of your education.
- (d) Play 10 rounds of the "AI or Not?" game to determine if the presented scenario utilizes AI.
- (e) Create a timeline with five key milestones in the development of artificial intelligence.

Requirement 3. Automation Basics. Do the following and share what you learned with your counselor:

- (a) Identify 10 examples of how automation is currently used in everyday life.
- (b) Identify 5 examples of how automation is currently used in the workplace.
- (c) Identify 5 examples of how automation can be used at school or in support of your education.
- (d) Explain how automation performs repetitive tasks without human intervention and how it reduces human error and optimizes resources.
- (e) Create a timeline with five significant milestones in automation development.

#### **Requirement 4.** Ethics in Al. Do the following and share what you learned with your counselor:

- (a) Research ethical concerns and responsible use in AI, including bias, privacy, and AI decision-making.
- (b) Work through 5 rounds of the "What Would You Do?" ethical decision-making scenarios.
- (c) Develop your own ethical guidelines for the use of AI.
- (d) What is the Turing test?

#### Requirement 5. Deepfakes. Do the following and share what you learned with your counselor:

- (a) Explain what a deepfake is and how it can affect an individual.
- (b) Describe what actions to take if you or someone you know is impacted by a deepfake.

#### **Requirement 6.** Developing AI Skills. Do the following and share what you learned with your counselor:

- (a) Discuss the learning process for AI and its limitations.
- (b) Identify 5 methods of how to effectively communicate with AI.
- (c) Explain the importance of prompt engineering when using AI to create better output.
- (d) Demonstrate 3 examples of writing clear instructions for a school-related task.
- (e) Complete the "Clear Communication Challenge" activity.

#### **Requirement 7.** Practical Application. Do ONE of the following:

- (a) With your counselor's approval, choose an artificial intelligence project based on your personal interest or a community need. Develop a plan outlining the project's objectives, data requirements, and potential ethical considerations. Implement the project utilizing appropriate artificial intelligence tools, languages, or platforms. Share your project with your counselor. Discuss the steps you followed to create the project and your experience during the process.
- (b) With your counselor's approval, design a short lesson plan on AI and teach it to your patrol of a group of Scouts. The lesson should include an AI-generated age-appropriate explanation of AI, examples of how AI is used in both everyday life as well as in the workplace, and an interactive demonstration of how Scouts could utilize AI to assist them with a school assignment, Scouting activity, or rank advancement. Share information on the development process and teaching experience with your counselor.

## $\textbf{Requirement 8.} \ \textbf{Career Exploration}. \ \textbf{Do ONE of the following}:$

- (a) Identify three career opportunities that would use skills and knowledge in artificial intelligence or automation. 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.
- (b) Interview an artificial intelligence or automation professional. Learn about their day-to-day work, the challenges they face, and their vision for the future of artificial intelligence or automation. Inquire about training, education, certification requirements, experience, and expenses associated with entering the field. Share what you learned with your counselor.



## **American Labor**

**Counselor:** Lex Barker (Troop 47 Great Falls Council)

**Session:** Morning

Merit Badge Requirement Revision: 2024 Printing

**Official Pamphlet:** <u>Download</u>

**Requirements:** View

## **Prerequisites:**

All requirements (1–9) should be completed in the merit badge workbook found at:

http://usscouts.org/usscouts/mb/mb121.asp

## **Animation**

**Counselor:** Jaime Grimes

**Session:** All Day

Merit Badge Requirement Revisions: 2025 Printing

Official Pamphlet: Animation Merit Badge Pamphlet (PDF)

**Requirements:** View

## **Prerequisites:**

There are **NO prerequisites** for animation

## **Archery**

**Counselor:** Leora Blum **Session:** Afternoon

Merit Badge Requirement Revisions: 2025 Printing Official Pamphlet: Archery Merit Badge Pamphlet (PDF)

**Requirements: View** 

## **Prerequisites:**

While there are **NO prerequisites** for archery, *It will be a partial the day of MBU*. Opportunities to complete Requirement #5 (Archery Shooting Qualification) will be scheduled <u>at a future date</u> with the assistance of Archery Crew 50.







## Art

Counselor: Sarah Lagnese

Session: Kiosk

Merit Badge Requirement Revision: 2025 Printing Official Pamphlet: Art Merit Badge Pamphlet (PDF)

**Requirements:** View

## Prerequisites:

*Art is* one of the Kiosk merit badges being offered. For the Kiosk merit badges all requirements must be completed before arriving at the Merit Badge University. Be prepared to discuss your interest in art and any previous projects.

*Al*l scouts taking this merit badge *should download* and complete the *Art* Merit Badge workshee*ts found at:* <a href="http://usscouts.org/usscouts/mb/mb021.asp">http://usscouts.org/usscouts/mb/mb021.asp</a>



## Citizenship in the Community

**Counselor:** Rob Merle **Session:** Morning

Merit Badge Requirement Revision: 2024 Printing

Official Pamphlet: Citizenship in the Community Pamphlet (PDF)

**Requirements:** View

## **Prerequisites:**

**Requirement 2:** Do the following:

- (a) Using an electronic mapping tool or paper map, locate and pinpoint the following services and landmarks in your community. Determine and record the distances from your home including driving time AND either walking or biking time.
  - 1. Chief government buildings such as your city hall, county courthouse, and public works/services facilities
  - 2. Fire station, police station, and hospital nearest your home
  - 3. Parks, playgrounds, recreation areas, and trails
  - 4. Historical or other interesting points of interest.

[NOTE: You will be shown a map of your community, and you will have to point these out to the counselor; each student in the class will be taken out of the room one at a time to do this task]

(b) Chart the organization of your local or state government. Show the top offices and tell whether they are elected or appointed.

## **Requirement 3:** Do the following:

- (a) Attend an in-person meeting of your city, town, or county council or school board, local court session; OR another state or local governmental meeting approved in advance by your counselor.
- (b) Choose one of the issues discussed at the meeting where a difference of opinions was expressed, and explain to your counselor why you agree with one opinion more than you do another one.

[NOTE: You will need to pick up an agenda at whatever meeting you attend, and give it to the counselor, so he can see the issue you have selected and verify you have attended the meeting. This is the only way you will receive credit for this requirement.]

**Requirement 4:** Choose an issue that is important to the citizens of your community; then do the following:

- (a) Find out which branch of local government is responsible for this issue.
- (b) With your counselor's and a parent or guardian's approval, interview one person from the branch of government you identified in requirement 4(a). Ask what is being done about this issue and how young people can help.
- (c) Share what you have learned with your counselor.

[NOTE: You should prepare a list of questions you are going to ask the person you are going to interview and show that to the counselor.]



**Requirement 5:** With the approval of your counselor and a parent or guardian, watch a movie that shows how the actions of one individual or group of individuals can have a positive effect on a community. Discuss with your counselor what you learned from the movie about what it means to be a valuable and concerned member of the community.

[NOTE: The following 62 movies have been approved; choose one of these to review and report.]

1	IN A War danful I : fo (1046)	22	A Ciril Astiss (1000)
1	It's A Wonderful Life (1946)	32	A Civil Action (1998)
2	The Day the Earth Stood Still (1951)	33	Grey Owl (1999)
3	12 Angry Men (1957)	34	Erin Brockovich (2000)
4	Inherit the Wind (1960)	35	Pay It Forward (2000)
5	To Kill A Mockingbird (1962)	36	The Replacements (2000)
_	The Man Who Shot Liberty Valance	37	Hawley County Way (2001)
6 7	(1962) Born Free (1966)	38	Harlan County War (2001)
/	Willy Wonka and the Chocolate	30	The Day After Tomorrow (2004)
8	Factory (1971)	39	Miracle (2004)
9	All The President's Men (1976)	40	Coach Carter (2005)
10	Logan's Run (1976)	41	The Constant Gardener (2005)
11	It Happened One Christmas (1977)	42	March of the Penguins (2005)
12	The China Syndrome (1979)	43	Akeelah & the Bee (2006)
13	The Deer Hunter (1979)	44	Cars (2006)
14	Norma Rae (1979)	45	The Insider (2006)
15	Bitter Harvest (1981)	46	We Are Marshall (2006)
16	E.T.: The Extra-Terrestrial (1982)	47	Hoot (2006)
17	Gandhi (1982	48	Texas Gold (2006)
18	The Scarlet And The Black (1983)	49	The 11 <sup>th</sup> Hour (2007)
19	The Never Ending Story (1984)	50	Michael Clayton (2007)
20	Star Trek IV: The Voyage Home (1986)	51	The Green Chain (2007)
21	Gorillas in the Mist (1988)	52	Sunshine (2007)
22	The Abyss (1989)	53	There Will Be Blood (2007)
23	The Mighty Ducks (1992)	53 54	Pride (2007)
23 24	Groundhog Day (1993)	5 <del>4</del>	The Good Witch (2008)
		56	
25	The Pelican Brief (1993)		Wall-E (2008)
26	Philadelphia (1993)	57 50	Avatar (2009)
27	Schindler's List (1993)	58	Extraordinary Measures (2010)
28	Dave (1993)	59	Dolphin Tale (2011)
29	Free Willie (1993)	60	Hugo (2011)
30	On Deadly Ground (1994)	61	The Lorax (2012)
31	Fire Down Below (1997)	62	Wreck It Ralph (2012)
			Home (2015)

Please have at least a typed written, double spaced, minimum one page reply to the above requirement and emailed to me one (1) week prior to the Merit Badge University. When you come to class and be ready to share your answer with the class.]

## **Requirement 7:** Do the following:

- (a) Identify three charitable organizations outside of Scouting that interest you and bring people in your community together to work for the good of your community.
- (b) Pick ONE of the organizations you chose for requirement 7(a). Using a variety of resources (including newspapers, fliers and other literature, the internet, volunteers, and employees of the organization), find out more about this organization.
- (c) With your counselor's and your parent or guardian's approval, contact the organization you chose for requirement 7(b), and find out what young people can do to help. While working on this merit badge, *volunteer at least eight hours of your time for the organization*. After your volunteer experience is over, discuss what you have learned with your counselor.

[NOTE: Your charitable organization must be outside of Scouting and cannot be something that is normally done by an organization. (Example: if your church runs confirmation classes, you cannot volunteer to teach the class, since this is done routinely by your church. It should be a non-for-profit organization you volunteer for, and your hours need to be signed off by someone from that organization (name, and title for the organization).]

**Requirement 8:** Develop a public presentation (such as a video, slide show, speech, digital presentation, or photo exhibit) about important and unique aspects of your community. Include information about the history, cultures, and ethnic groups of your community; its best features and popular places where people gather; and the challenges it faces. Stage your presentation in front of your counselor or a group, such as your patrol or a class at school.

## Citizenship in the Nation

Counselor: Bill Kostyshak

**Session(s):** Morning and Afternoon

Merit Badge Requirement Revision: 2025 Printing

Official Pamphlet: Citizenship in the Nation Pamphlet (PDF)

**Requirements:** View



IT IS HIGHLY RECOMMEDED THAT SCOUTS NEED TO BE FIRST CLASS RANK OR HIGHER; OR BE IN THE  $8^{TH}$  GRADE OR HIGHER; OR  $13^{TH}$  YEARS OLD TO TAKE THIS MERIT BADGE.

## **Prerequisites:**

**Requirement 4:** Discuss the importance of:

- (a) Declaration of Independence
- (b) Bill of Rights (the first 10 Amendments to the Constitution) and the 14th Amendment
- (c) "E Pluribus Unum," the traditional United States motto.

[NOTE: Read each of the documents and be prepared to discuss them in class. You can get these documents from the internet or from the World Almanac.]

**Requirement 5:** Watch the national evening news for five days in a row or read the main stories in a national media organization (e.g., a newspaper or news website) for five days in a row. Discuss the national issues that you learned about with your counselor. Choose one issue and explain how it affects you, your family, and community.

[NOTE: Each student in the class may be taken out of the room one at a time to do this task]

**Requirement 6.** With your counselor's approval, choose a speech of national historical importance. Explain:

- (a) Who the author was
- (b) What the historical context was
- (c) What difficulties the nation faced that the author wished to discuss
- (d) What the author said
- (e) Why the speech is important to the nation's history
- (f) Choose a sentence or two from the speech that has significant meaning to you, and tell your counselor why.

[Please have at least a typed written, double spaced, minimum one-page reply to the above requirement when you come to class and be ready to share your answer with the class.]

#### Some examples of American Historical speeches are:

- 1) Patrick Henry "... give me liberty or give me death!" speech on March 23, 1775
- 2) President George Washington's Farewell Address, September 19, 1796
- 3) Elizabeth Cady Stanton's "Seneca Falls Address", July 19, 1848
- 4) President Abraham Lincoln's Gettysburg Address, November 19, 1863
- 5) President Abraham Lincoln's Second Inaugural Address, March 4, 1865
- 6) Susan B. Anthony's speech defending woman's rights to vote in 1873
- 7) William Jennings Bryan's "Cross of Gold" speech, July 9, 1896
- 8) President Franklin Delano Roosevelt's First Inaugural Address (Fear speech), March 4, 1933
- 9) President Franklin Delano Roosevelt's War Message, December 8, 1941, the day after Pearl Harbor
- 10) Eleanor Roosevelt's "The Struggle for Human Rights" speech, September 28, 1948, to the United Nations.
- 11) President Dwight D. Eisenhower's "Atoms for Peace" speech, December 8, 1953
- 12) President John F. Kennedy's Inaugural Address, January 20, 1961
- 13) General of the Army Douglas MacArthur Farewell Address ("Duty, Honor, Country"), May 12, 1962
- 14) Malcolm "X's" The Ballot or the Bullet speech, April 3, 1964
- 15) President Lyndon Baines Johnson's "Voting Rights Act" speech, March 15, 1965
- 16) Muhammad Ali's graduation speech at Harvard, June 4, 1975
- 17) President Ronald Reagan's "Tear Down This Wall" speech, June 12, 1987
- 18) Jim Valvano's "Don't Give Up" speech, March 4, 1993
- 19) Hilary Rodham Clinton's "Women's Right are Human Rights" speech, September 5, 1995

#### **Requirement 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 and what you learned about its function in the local community and how it serves this nation.
- (d) Choose a United States national monument that interests you. Using books, brochures, the internet (with your parent or guardian'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.

[NOTE: For the purposes of this Merit Badge University, a letter from the scout's parent(s) stating the scout has done two of these is sufficient for this requirement. The parent needs to state which two the scout did. Be prepared to discuss in class.]

**Requirement 8:** Name your representatives in the United States Congress. Write a letter to your representative in Congress explaining your views on a national issue. Show your letter, along with any response you receive, to your counselor.

## Some national issues that are problems almost every year facing Congress:

- 1. Great Lakes Fresh Water [At present not a problem]
- 2. Abolishing the Electoral College [At present a debate]
- 3. Reparations for Black Americans [Slavery Issue in the United States]
- 4. Statehood for the District of Columbia
- 5. Pass 10-year plan to balance budget
- 6. Balanced budget amendment
- 7. Employment Non-Discrimination Act
- 8. \$15 Federal Minimum Wage
- 9. Federal Government Common Core Program in Education
- 10. Support Legislature to Prohibit Foreign Nations from Purchasing Farmland in the United States
- 11. Pass Puerto Rico Debt Bill [Signed into law; but, has future consequences]
- 12. Keystone Pipeline [On paper, project is dead by President Biden]

Some national issues facing our 118th Congress (January 3, 2023 to January 3, 2025) are:

- 13. U. S. Citizenship Act [White House Immigration Plan]
- 14. Defund Public Broadcasting
- 15. Defend Immigrant Sanctuary Cities
- 16. Renewable Energy Through Carbon Tax
- 17. U.S. Mexican Border Issue
- 18. Background Checks for All Gun Sales
- 19. The NATO Support Act
- 20. Permanent Abortion Funding Ban
- 21. Pass the Equality Act
- 22. Equal Rights Amendment
- 23. Statehood for Puerto Rico
- 24. Cut Defense Spending
- 25. Public Health-Care Option
- 26. Domestic Terrorism Prevention Act
- 27. Ban Oil, Gas Leasing on Federal Lands
- 28. Expand the Supreme Court
- 29. Biden's Fiscal 2025 Budget Proposal
- 30. Debt Ceiling
- 31. \$1 trillion Infrastructure Bill
- 32. "Build Back Better" Bill
- 33. Russia's War Against Ukraine
- 34. China

## Citizenship in the World

Counselor: Vince Mohr

**Session:** Morning and Afternoon

Merit Badge Requirement Revision: 2023 Printing

Official Pamphlet: Citizenship in the World Pamphlet (PDF)

**Requirements:** View



IT IS HIGHLY RECOMMEDED THAT SCOUTS NEED TO BE FIRST CLASS RANK OR HIGHER; OR BE IN THE  $9^{\rm TH}$  GRADE OR HIGHER; OR  $14^{\rm TH}$  YEARS OLD TO TAKE THIS MERIT BADGE.

## **Prerequisites:**

**Requirement 3:** Do the following:

(a) Pick a current world event. In relation to this current event, discuss with your counselor how a country's national interest and its relationship with other countries might affect areas such as its security, its economy, its values, and the health of its citizens.

[Please have at least a typed written, double spaced, one-page reply to the above requirement when you come to class and be ready to share your answer with the class.]

(b) Select a foreign country and discuss with your counselor how its geography, natural resources, and climate influence its economy and its global partnerships with other countries.

[Please have at least a typed written, double spaced, one-page reply to the above requirement when you come to class and be ready to share your answer with the class.]

**Requirement 4(b):** Using resources such as major daily newspapers, the internet (with your parent or guardian's permission), and news magazines, observe a current issue that involves international trade, foreign exchange, balance of payments, tariffs, and free trade. Explain what you have learned. Include in your discussion an explanation of why countries must cooperate in order for world trade and global competition to thrive.

Requirement 5(b): Name at least five different types of governments currently in power in the world. [For requirement 5b, please know at least five different types of governments currently in power in the world and for requirement 5c know prior to coming to class where countries that use each of those five different forms of government are on a world map.

Please have examples ready similar to this format (you may not use these two examples when you come to class): the United States is classified as a Federal Republic with a Representative Democracy, headed by a President. The United States is in the middle of North America. The Vatican City is a Papacy, ruled by the Pope. The Vatican City State is inside the city limits of Rome, Italy.]

Requirement 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 website of the U.S. State Department. Learn more about an issue you find interesting that is discussed on this website.
- (b) Visit the website 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.

[NOTE: For the purposes of this Merit Badge University, a letter from the scout's parent(s) stating the scout has done two of requirements 7c, 7d, or 7e of these is sufficient for this requirement. The parent needs to state which two the scout did; or the scout has done one of requirement 7c, 7d, or 7e and can show material from requirement 7a or 7b.]

#### **Collections**

**Counselor:** Kelly Myers

**Session:** Kiosk

Merit Badge Requirement Revision: 2025 Printing

Official Pamphlet: Collections Pamphlet (PDF)

**Requirements:** View

## **Prerequisites:**

Collections is one of the Kiosk merit badges being offered. For the Kiosk merit badges all requirements must be completed before arriving at the Merit Badge University.

All scouts taking this merit badge to download and complete the Collections Merit Badge worksheets <a href="http://usscouts.org/usscouts/mb/mb128.asp">http://usscouts.org/usscouts/mb/mb128.asp</a>

## **Digital Technology**

**Counselor:** David Spina **Session:** Afternoon

Merit Badge Requirement Revision: 2024 Printing Official Pamphlet: <u>Digital Technology Pamphlet (PDF)</u>

**Requirements:** View

## **Prerequisites:**

**Requirement 5b:** Using an internet search engine (with a parent or guardian's permission), find ideas from at least three different websites about how to conduct a troop court of honor or campfire program. Present the ideas to your counselor and explain how you used a search engine to find this information.

**Requirement 6:** Perform 3 of the tasks and bring evidence of those digital items that were created to the class. If any requirement involves the transfer or sharing of content, and email is used, be sure to include the counselor and at least one other adult on the email.

Requirement 9a: Identify three career opportunities that involve digital technology. Pick one and investigate the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.

Scouts *should* bring a device (laptop, smartphone, or Chromebook) to show output of their prerequisites, especially for requirement #6.

## **Electronics**

**Counselor:** Joel Weber **Session:** Morning

**Merit Badge Requirement Revision:** 2025 Printing **Official Pamphlet:** Electronics Pamphlet (PDF)

**Requirements:** View

## Prerequisites: < Updates Pending...>

**Requirement 6:** Identify three career opportunities that would use skills and knowledge in Electronics. 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.







## **Engineering**

**Counselor:** Gerry Hurley **Session:** Afternoon

Merit Badge Requirement Revision: 2023 Printing

Official Pamphlet: Engineering Merit Badge Pamphlet (PDF)

**Requirements:** View

**Prerequisites: < Updates Pending...>** 

**Requirement 1:** Select a manufactured item in your home (such as a toy or an appliance) and, under adult supervision and with the approval of your counselor, investigate how and why it works as it does. Find out what sort of engineering activities were needed to create it. Discuss with your counselor what you learned and how you got the information.

Resource: How to Fix Small Appliances (video)

**Requirement 2:** Select an engineering achievement that has had a major impact on society. Using resources such as the internet (with your parent or guardian's permission), books, and magazines, find out about the engineers who made this engineering feat possible, the special obstacles they had to overcome, and how this achievement has influenced the world today. Tell your counselor what you learned.

Resources: Engineering the Brooklyn Bridge in 1883 (video) Engineering America (website)

**Requirement 4:** Visit with an engineer (who may be your counselor, parent or guardian) and do the following:

- (a) Discuss the work this engineer does and the tools the engineer uses.
- (b) Discuss with the engineer a current project and the engineer's particular role in it.
- (c) Find out how the engineer's work is done and how results are achieved.
- (d) Ask to see the reports that the engineer writes concerning the project.
- (e) Discuss with your counselor what you learned about engineering from this visit.

**Requirement 5:** Use the systems engineering approach to design an original piece of patrol equipment, a toy or a useful device for the home, office or garage.

Resource: The Engineering Process (video)

**Requirement 9:** Find out about three career opportunities in engineering. Pick one and research the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.

Resource: How to Become an Engineer (video)

All scouts taking this merit badge should download and complete the above requirements in the Engineering Merit Badge worksheets found at: <a href="http://usscouts.org/usscouts/mb/mb046.asp">http://usscouts.org/usscouts/mb/mb046.asp</a>



## **First Aid**

**Counselor:** Heidi Thorpe-Messmer

**Session:** All Day

Merit Badge Requirement Revision: 2023 Printing

Official Pamphlet: First Aid Pamphlet (PDF)

**Requirements:** View

## **Prerequisites:**

Scouts are required to read the First Aid merit badge book (any book since 2010 printing).

**Requirement 2:** Preparing for First Aid Emergencies. Do the following:

- (a) Obtain a copy of the Scout Annual Health and Medical Record and discuss the importance of the form including information on immunizations, allergies, medications, health history, and medical examinations to providing first aid at Scouting events.
- (b) Using checklists provided in the First Aid merit badge pamphlet or ones approved by your counselor, do the following:
  - 1. Assemble a personal first-aid kit for hiking and backpacking. Demonstrate the proper use of each item in your first-aid kit to your counselor.
  - 2. With your counselor, inspect a unit, home, vehicle, or camp first-aid kit and discuss your findings.

Store bought First Aid kits will not be accepted.



## Genealogy

Counselor: Lori Mannhardt

**Session:** Afternoon

Merit Badge Requirement Revision: 2024 Printing

Official Pamphlet: Genealogy Pamphlet (PDF)

**Requirements: View** 

## **Prerequisites:**

**Requirement 2:** Do ONE of the following:

(a) Create a time line for yourself or for a relative. Then write a short biography based on that time line.

Resource: All About Timelines (video) (b) Keep a journal for six weeks.

You must write in it at least once a week.

Resource: How to Journal (video)

Requirement 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. Resource: How to Master the Art of Interviewing With 5 Easy Journalist Techniques (video)

#### **Requirement 4:** Do the following:

(c) Obtain at least one genealogical document that supports an event that is or can be recorded on your pedigree chart or family group record.

[The document could be found at home or at a government office, religious organization, archive, or library.]

**Requirement 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

Resource: Why Join a Genealogical Society (video)

(b) A professional genealogist (someone who gets paid for doing genealogical research)

Resource: How to Hire a Professional Genealogist (video)

(c) A surname organization, such as your family's organization

Resource: Facebook Surname Groups (video)

(d) A genealogical educational facility or institution.

Resource: Getting Started With the Genealogy Center (video)

(e) A genealogical record repository of any type (courthouse, genealogical library, state or national archive, state library, etc.).

Resource: Where to Find Records for Family History Research (video)

Requirement 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.

Resource: How to Make a Family Tree (on Paper, Not Online To Avoid Putting Private Information Online) (video)

Requirement 7: Complete a family group record form, listing yourself and your brothers and sisters as the children. On another family group record form, show one of your parents and his or her brothers and sisters as the children. This requirement may be completed using the chart provided or the genealogy software program of your choice.

Resource: How to Use Family Group Sheets (video)

NOTE: To obtain a Pedigree Chart and/or a Family Group Record Sheet go to Genealogy Merit Badge at: http://usscouts.org/usscouts/mb/mb056.asp The instructions for obtaining both forms are listed under the requirements and well as the genealogy worksheet which contains both forms.



#### **Indian Lore**

**Counselor:** Gerry Hurley

**Session:** Morning

Merit Badge Requirement Revision: 2024 Printing Official Pamphlet: Indian Lore Pamphlet (PDF)

**Requirements:** View

# Prerequisites: Requirement 2:

Research an American Indian tribe, group, or nation. Tell your counselor about traditional dwellings, way of life, tribal government, religious beliefs, family and clan relationships, language, clothing styles, arts and crafts, food cultivation, foraging and preparation, means of getting around, games, customs in warfare, and where and how they live today.

[Note: This requirement needs to be typed out. It should be a minimum of 500 words and sent to the Merit Badge Counselor one (1) week before the Merit Badge University. In this case due on Saturday, November 29, 2025.]

## **Requirement 3:** Do the following:

- (a) Learn 10 common terms in an American Indian language and their meanings.
- (b) Identify the meaning of 10 place names of American Indian origin in the United States.
- (c) Name five well-known American Indian leaders, either from the past or people of today. Give their tribes or nations. Describe what they did or do now that makes them notable.

## **Requirement 4:** Do the following:

- (a) Describe how life might have been different for the European settlers if there had been no Native Americans to meet them when they came to this continent.
- (b) Describe eight things adopted by others from American Indians.
- (c) Learn a game played by a group or tribe. Teach and lead it with a Scout group.



## **Inventing**

Counselor: Nate Ransom

**Session:** Morning

Merit Badge Requirement Revision: 2021 Printing

Official Pamphlet: Inventing Pamphlet (PDF)

**Requirements:** View

## **Prerequisites:**

**Requirement 2:** Do ONE of the following:

- (a) Identify and interview with a buddy (and with your parent or guardian's permission and counselor's approval) an individual in your community who has invented a useful item. Report what you learned to your counselor.
- (b) Read about three inventors. Select the one you find most interesting and tell your counselor what you learned.

**Requirement 6.** Think of an item you would like to invent that would solve a problem for your family, troop, chartered organization, community, or a special-interest group. Then do the following, while keeping a notebook to record your progress.

- (a) Talk to potential users of your invention and determine their needs. Then, based on what you have learned, write a statement describing the invention and how it would help solve a problem. This statement should include a detailed sketch of the invention.
- (b) Create a model of the invention using clay, cardboard, or any other readily available material. List the materials necessary to build a working prototype of the invention.
- (c) Share the idea and the model with your counselor and potential users of your invention. Record their feedback in your notebook.

**Requirement 7.** Build a working prototype of the item you invented for requirement 6. Test and evaluate the invention. Among the aspects to consider in your evaluation are cost, usefulness, marketability, appearance, and function. Describe how your original vision and expectations for your invention are similar or dissimilar to the prototype you built. Have your counselor evaluate and critique your prototype. **NOTE:** 

**For Requirements 6 and 7:** Scouts must reach out to Mr. Ransom with their proposed invention idea and plan for creating a model of the invention prior to the MBU. Once the proposal is approved, they may construct their model and bring photos or other evidence of the model to the MBU session. The scouts should also be prepared to discuss what they learned from the process.

#### **Requirement 8.** Do ONE of the following:

- (a) Participate with a club or team (robotics team, science club, or engineering club) that builds a useful item. Share your experience with your counselor.
- (b) Visit a museum or exhibit dedicated to an inventor or invention, and create a presentation of your visit to share with a group such as your troop or patrol.



#### Music

**Counselor:** Kelly Myers **Session:** Morning

Merit Badge Requirement Revision: 2024 Printing

Official Pamphlet: Music Pamphlet (PDF)

**Requirements:** View

## **Prerequisites:**

**Requirement 1.** Sing or play a simple song or hymn chosen by your counselor, using good technique, phrasing, tone, rhythm, and dynamics. Read all the signs and terms of the score.

Resources: How to Read Music (video)

**Violin Demonstration (video)** 

Instrument Demonstration for Beginning Band (video)

## **Requirement** 3. Do TWO of the following:

(a) Attend a live performance, or listen to three hours of recordings from any two of the following musical styles: blues, jazz, classical, country, bluegrass, ethnic, gospel, musical theater, opera. Describe the sound of the music and the instruments used. Identify the composers or songwriters, the performers, and the titles of the pieces you heard. If it was a live performance, describe the setting and the reaction of the audience. Discuss your thoughts about the music.

## [Bring a program of the concert and be prepared to talk about it]

- (b) Interview an adult member of your family about music. Find out what the most popular music was when he or she was your age. Find out what his or her favorite music is now, and listen to three of your relative's favorite tunes with him or her. How do those favorites sound to you? Had you ever heard any of them? Play three of your favorite songs for your relative, and explain why you like these songs. Ask what he or she thinks of your favorite music.
- (c) Serve for six months as a member of a school band, choir, or other organized musical group, or perform as a soloist in public six times.

## [Bring a report card or other evidence that they play in a school music ensemble]

(d) List five people who are important in the history of American music and explain to your counselor why they continue to be influential. Include at least one composer, one performer, one innovator, and one person born more than 100 years ago.

## **Requirement** 4. Do ONE of the following:

- (a) Teach three songs to a group of people. Lead them in singing the songs, using proper hand motions.
- (b) Compose and write the score for a piece of music of 12 measures or more, and play this music on an instrument.
- (c) Make a traditional instrument and learn to play it.

Reminder: All scouts need to bring an instrument with them.



## **Personal Management**

## **Personal Management Counselor:** Tim Bushnell

**Session:** All Day

Merit Badge Requirement Revision: 2025 Printing

Official Pamphlet: Personal Management Pamphlet (PDF)

**Requirements:** View

## **Prerequisites:**

During the session, you can realistically expect to complete requirements 3, 4, 5, 6, 7, and the discussion for 1b, and 10b.

## **Requirement 1**: Do the following:

- (a) Choose an item that your family might want to purchase that is considered a major expense.
- (b) Write a plan that tells how your family would save money for the purchase identified in requirement 1(a).
  - (1) Discuss the plan with your counselor.
  - (2) Discuss the plan with your family.
  - (3) Discuss how other family needs must be considered in this plan.
- (c) Develop a written shopping strategy for the purchase identified in requirement 1(a).
  - (1) Determine the quality of the item or service (using consumer publications or rating systems.)
  - (2) Comparison shop for the item. Find out where you can buy the item for the best price. (Provide prices from at least two different price sources.) Call around; study ads. Look for a sale or discount coupon. Consider alternatives. Can you buy the item used? Should you wait for a sale?

## **Requirement 2.** Do the following:

- (a) Prepare a budget reflecting your expected income (allowance, gifts, wages), expenses, and savings for a period of 13 consecutive weeks.
- (b) Compare expected income with expected expenses.
  - (1) If expenses exceed budget income, determine steps to balance your budget.
  - (2) If income exceeds budget expenses, state how you would use the excess money (new goal, savings).
- (c) Track and record your actual income, expenses, and savings for 13 consecutive weeks (the same 13-week period for which you budgeted). (You may use the forms provided in the Personal Management merit badge pamphlet, devise your own, or use a computer-generated version.) When complete, present the records showing the results to your counselor.
- (d) Compare your budget with your actual income and expenses to understand when your budget worked and when it did not work. With your counselor, discuss what you might do differently the next time.



**Requirement 8:** Demonstrate to your counselor your understanding of time management by doing the following:

- (a) Write a "to do" list of tasks or activities, such as homework assignments, chores, and personal projects, that must be done in the coming week. List these in order of importance to you.
- (b) Make a seven-day calendar or schedule. Put in your set activities, such as school classes, sports practices or games, jobs or chores, and/or Scout or place of worship or club meetings, then plan when you will do all the tasks from your "to do" list between your set activities.
- (c) Follow the one-week schedule you planned. Keep a daily diary or journal during each of the seven days of this week's activities, writing down when you completed each of the tasks on your "to do" list compared to when you scheduled them.
- (d) With your counselor, review your "to do" list, one-week schedule, and diary/journal to understand when your schedule worked and when it did not work. Discuss what you might do differently the next time.

**Requirement 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 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.

## **Requirement 10:** Do the following:

- (a) Choose a career you might want to enter after high school or college graduation. Discuss with your counselor the needed qualifications, education, skills, and experience.
- (b) Explain to your counselor what the associated costs might be to pursue this career, such as tuition, school or training supplies, and room and board. Explain how you could prepare for these costs and how you might make up for any shortfall.

#### **Pets**

Counselor(s): David Spina, Dale Musson

Session: Kiosk

Merit Badge Requirement Revision: 2024 Printing

Official Pamphlet: Pets Pamphlet (PDF)

**Requirements:** View

## **Prerequisites:**

Pets is one of the Kiosk merit badges being offered. For the Kiosk merit badges all requirements must be completed before arriving at the Merit Badge University.

All scouts taking this merit badge should download and complete the Art Merit Badge worksheets found at: <a href="http://usscouts.org/usscouts/mb/mb082.asp">http://usscouts.org/usscouts/mb/mb082.asp</a>

#### Requirement 4: Do ONE of the following:

(a) Show your pet in a pet show.

Resource: Cat Agility Course at Cat Fanciers Cat Show (video)

(b) Start a friend raising a pet like yours. Help your friend get a good start.

(c) Train a pet in three or more tricks or special abilities.

Resources: Easiest Way to Teach Your Dog to Roll Over (video)

Train Your Cat to Do Fun Tricks (video)
How I Trained My Cat to Fetch (video)

[NOTE: If you do requirement 4c,

make a video of you training your pet on your cell phone.]

## **Public Speaking**

**Counselor:** Lex Barker **Session:** Afternoon

Merit Badge Requirement Revision: 2020 Printing Official Pamphlet: Public Speaking Pamphlet (PDF)

**Requirements:** View

#### **Prerequisites:**

Strongly recommend using the merit badge workbook for prerequisites at <a href="http://usscouts.org/usscouts/mb/mb121.asp">http://usscouts.org/usscouts/mb/mb121.asp</a>

**Requirement 2:** Prepare a three- to five-minute talk on a topic of your choice that incorporates body language and visual aids.

**Requirement 4:** Select a topic of interest to your audience. Collect and organize information about the topic and prepare an outline. Write an eight- to 10-minute speech, practice it, then deliver it in a conversational way.

**Requirement 5:** Show you know parliamentary procedure by leading a discussion or meeting according to accepted rules of order; or by answering questions on the rules of order.

There will be a group discussion on Parliamentary Procedure.





## **Scholarship**

Counselor: Raymond Mannhardt

**Session:** Kiosk

**Merit Badge Requirement Revision:** 2024 Printing **Official Pamphlet:** <u>Scholarship Pamphlet (PDF)</u>

**Requirements:** View

## **Prerequisites:**

Scholarship is one of the Kiosk merit badges being offered. For the Kiosk merit badges all requirements must be completed before arriving at the Merit Badge University.

All scouts taking this merit badge should download and complete the Art Merit Badge worksheets found at: http://usscouts.org/usscouts/mb/mb100.asp

Bring any support documents needed to ensure that you can get signed off:

- Report Cards
- Note from the principal of your school
- Essay
- Etc.

#### **Textiles**

Counselor: Lori Mannhardt

**Session:** Morning

Merit Badge Requirement Revision: 2019 Printing

Official Pamphlet: Textiles Pamphlet (PDF)

**Requirements:** View

## **Prerequisites:**

Please print the merit badge worksheet from <a href="http://usscouts.org/usscouts/mb/mb110.asp">http://usscouts.org/usscouts/mb/mb110.asp</a> and complete requirements 4 and 6.

**Requirement 4**: Explain the meaning of 10 of the following terms: warp, harness, heddle, shed, aramid, spandex, sliver, yarn, spindle, distaff, loom, cellulose, sericulture, extrusion, carbon fibers, spinneret, staple, worsted, nonwoven, greige goods.

Resource: Loom and Weaving Terminology (video)

**Requirement** 6: Explain to your counselor, either verbally or in a written report, five career possibilities in the textile industry. Tell about two positions that interest you the most and the education, cost of training and specific duties those positions require.

Resources: Careers in the Fashion & Textiles Industry (video)

Want to Work in the Textiles Industry? (video)

**Textile Engineering Careers (video)** 

Day in the Life of a Textile Engineer (video)



