

Artificial Intelligence Merit Badge PreReq Worksheet

NAME:

UNIT:

Please fill this page out and bring to class, or email responses to garrisonlerock@gmail.com

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

Variables

4. Ethics in AI. 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.

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 or 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.

8. Career Exploration. 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.