

Machine Learning KSAs for Curriculum Alignment

3. Data Visualization and Communication

	KSA Description	Knowledge, Skill, or Ability?	Bloom's Taxonomy Level?	Cross-cutting KSAs	Course Number/Name	Learning Outcome
a	Explain the role of data visualization in discovery, communication, and decision-making.	Knowledge	3	Generalist 4a, Data Analytics 6a		
b	Evaluate data visualization options for proper application in various situations.	Ability	4	Generalist 4b, Data Analytics 6c		
c	Create effective static and interactive data visualizations or storytelling that employ analytics and visualization software and strategies for various audiences.	Skill-	3	Generalist 4c, Data Analytics 6e		
d	Visualize data using various types of displays including tables, dashboards, graphs, maps, and trees.	Skill-	3	Generalist 4d, Data Analytics 6d		
e	Distinguish between advanced visualizations and explain the advantages of each.	Knowledge	3	Generalist 4e		
f	Discuss techniques for creating advanced data visualizations.	Knowledge	3	Generalist 4f		
g	Apply the principles of color, composition, and hierarchy to design.	Skill	3	Generalist 4g		
h	Properly define a problem in context, use appropriate data, and deliver a compelling visualization to explain or answer a question.	Ability	3	Generalist 4h, Data Analytics 6f		
i	Understanding of ADA/508 compliance for accessibility.	Knowledge	1	Generalist 4i		