

Data Analytics KSAs for Curriculum Alignment

8. Data Ethics						
	KSA Description	Knowledge, Skill, or Ability?	Bloom's Taxonomy Level?	Cross-cutting KSAs	Course Number/Name	Learning Outcome
a	Identify how global legal, policy and/or ethical constraints might impact data analyses.	Knowledge	2	Generalist 5a, Machine Learning 5a		
b	Identify the established ethical and legal issues in data management facing organizations.	Knowledge	2	Generalist 5b, Machine Learning 5b, Data Management 3e		
c	Explain how ethical, compliance, and legal issues should/must be considered in data driven decision making.	Knowledge	1	Generalist 5c, Machine Learning 5c		
d	Discuss the importance of provenance, transparency, and explainability in data analysis and the ability to build trust.	Knowledge	2	Machine Learning 5f		
e	Present real world examples of data bias and the unintended consequences of using data analytics and AI in making decisions.	Knowledge	2	Machine Learning 5e		
f	Recognize the importance that data protection plays in managing data and building trust.	Knowledge	2			
g	Explain the way your data analytics algorithms are vulnerable and can be manipulated.	Knowledge	2			
h	Explain the limitations of using data analytics tools.	Knowledge	2			
i	Explain the importance of general privacy that may include legal constraints issues related to the collection and usage of data.	Knowledge	2	Generalist 5d, Machine Learning 5g, Data Management 3f		
j	Explain the limitations and potential unintended effects of data analysis when such algorithms encounter new scenarios.	Knowledge	2	Machine Learning 5i		