Data Management KSAs for Curriculum Alignment

5. Data Warehousing and Business Intelligence					
	KSA Description	Knowledge, Skill, or Ability?	Bloom's Taxonomy Level?	Cross-cutting KSAs	Course Number/Name	Learning Outcome
a	Explain business intelligence and identify the underlying technologies needed to support it.	Knowledge	3			
b	Explain data warehousing and identify the various schemas (Star, Snow Flake, Galaxy, etc.).	Knowledge	3			
c	Describe and differentiate operational data store (ODS) vs data warehouse.	Knowledge	2			
d	Describe and differentiate data mart vs data lake.	Knowledge	2			
e	Demonstrate understanding and ability to apply basic statistics.	Knowledge	3			
f	Understand the use of estimation statistics to determine what can (and cannot) be answered by the available data.	Knowledge	2			
g	Demonstrate ability to create appropriate (SQL) queries to support DW and BI activities.	Ability	4			
h	Describe data visualization using various tools and the role it plays in BI.	Knowledge	2			
i	Demonstrate ability to use Excel as a basic data analysis tool (including pivot tables).	Skill	2			
j	Explain decision analysis type framework (empirical data analysis).	Knowledge	2			
k	Describe data analytics and differentiate descriptive, prescriptive, predictive and cognitive.	Knowledge	2			
l	Describe source to target mapping (in terms extraction, transformation and loading).	Knowledge	2			
m	Explain prototyping and its role in BI and DW.	Ability	2			