Software Development KSAs for Curriculum Alignment

3. Fundamental Data Structures					
	KSA Description	Knowledge, Skill, or Ability?	Bloom's Taxonomy Level?	Cross-cutting KSAs	Course Number/Name	Learning Outcome
a	Discuss the appropriate use of built-in data structures.	Knowledge	1			
b	Describe common applications for data structures such as: stack, queue, priority queue, set, and map.	Knowledge	1			
c	Write programs that use each of the following data structures: arrays, records/structs, strings, linked lists, stacks, queues, sets, and maps.	Skill	3	Cybersecurity 3f		
d	Write programs that can use each of the following data structures: heaps and B-trees.	Skill	3			
e	Compare alternative implementations of data structures with respect to performance.	Skill	4			
f	Choose the appropriate data structure for modeling a given problem.	Skill	3	Cybersecurity 11a		
g	Identify the costs and benefits of dynamic and static data structure implementations.	Knowledge	1			