Program SLOs	4 SH GIS 4043/L or GIS5050/L Geographic Information Systems	4 SH GIS 4006/L or GIS5007/L Computer Cartography	4 SH GIS 4035/L or GIS5027/L Photo Interpretation and Remote Sensing, Aerial Photography and Remote Sensing	3sh GIS 5103 GIS Programming	Course Cluster 1 (3 SH) (Students Select One Course) GIS 5100 Applications in Geographic Information Systems	GIS 5265 GIS Applications in Archaeology	Course Cluster 2 (3 SH) (Students Select One Course) GIS 5935 Special Topics in Geographic Science	GIS 5938 Special Topics in GIS for Archaeology	Course Cluster 3 (3 SH) (Students Select One Course) GIS 5945 GIS Internship	GIS 6905 Directed Study
Design maps that are fit-for-purpose and effectively convey the information they are intended to by following fundamental cartographic principles	Introduced	Mastered	Reinforced		Reinforced	Reinforced	Reinforced	Reinforced		
Effecitvely communicate processes and solutions to the intended audience using appropriate media	Introduced	Introduced	Introduced	Reinforced	Reinforced	Reinforced	Mastery	Mastery		
Demonstrate a theorethical knowledge of techniques for spatial data analysis	Introduced	Introduced	Introduced	Reinforced	Reinforced	Reinforced	Mastery	Mastery	Mastery	Mastery

Department Name: Earth and Environmental Sciences
Department URL

Program Name: Graduate Geographic Information Science Certificate
Creation Date: December 2019