

CEL GIS Certificate Equivalencies

Course Number	Course Name	Equivalent
Core Courses:		
Geog 9003	Introduction to GIS	Geog 603 OR Combination of USP 492 + 493
Geog 9022	Data Acquisition for GIS	Geog 603
Geog 9015	Database Management for GIS	
Geog 9009	Cartographic Design for GIS	Geog 606
Geog 9004	Managing a GIS Project	
Current Electives:		
Geog 9008	Raster GIS and Analysis	Geog 621/721
Geog 9010	Using GIS for GPS	
Geog 9011	Remote Sensing in GIS, Part I	Geog 610
Geog 9013	Spatial Analysis and Modeling	Geog 620/720
Geog 9023	GIS and Remote Sensing for Coastal & Marine Science	Geog 629
Geog 9029	Processing GIS Data with Modelbuilder and Python	Combination of Geog 620/720 + 625
Geog 9021	GIS Programming with Python	Geog 625
Geog 9030	Building a Geodatabase	Geog 620/720
Geog 9020	Scientific Visualization in GIS	Geog 621/721
Geog 9024	Watershed GIS	Geog 642
Geog 9027	Spatial Analysis of Public Health Data	
Geog 9031	Introduction to R	Geog 604/704
Geog 9032	Ecological Applications of GIS	
Geog 9033	GIS for Sustainable Planning and Urban Design	
Geog 9034	Building JavaScript Web Mapping Applications	
Geog 9035	Remote Sensing with LiDAR	
Geog 9036	2D and 3D Mapping with Drones	
Non-Current Electives:		
Geog 9019	Remote Sensing in GIS, Part II	Geog 611/711
Geog 9026	GIS in Crime Analysis	
Geog 9099	Further Exploration of ArcGIS	