

# Certificate in Geographic Information Science (GEOCT01) 23-24 units

*For GIS Certificate Advising:*

Undergraduate Students contact Dr. Linna Li ([Linna.Li@csulb.edu](mailto:Linna.Li@csulb.edu))

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<b>Student Name:</b>			<b>ID:</b>
<b>Units</b>	<b>Semester</b>	<b>Certificate Requirements</b>	<b>Waive/Sub</b>
<b>Prerequisite Courses (9 units)</b>			
<i>Take each of the following courses or equivalent</i>			
3		GEOG 200 Intro Research Methods for GEOG (or equivalent)	
3		GEOG 280 Intro Geospatial Techniques (or GEOG 371, 471 or 481)	
3		GEOG 380 Intro to Digital Cartography & Analysis	
<b>Core Courses (3 courses, 12 Units)</b>			
<i>Take each of the following courses</i>			
4		GEOG 400 or 500 Multivariate Geographical Analysis	
4		GEOG 473 Introduction to Earth Observation	
4		GEOG 485 or 585 Principles of GIS	
<b>Specialization Options (3 courses; 11-12 units)</b>			
<b>Remote Sensing</b>			
4		GEOG 475 or 575 Geographic Applications in Remote Sensing	
<b>Cartographic Design</b>			
4		GEOG 482 or 582 Advanced Digital Cartography & GIS	
<b>Advanced Geographic Information Systems</b>			
4		GEOG 484 or 584 Enterprise GIS Development	
4		GEOG 487A or 587A Environmental GIS	
4		GEOG 487B or 587B Urban GIS	
4		GEOG 488 or 588 Geographic Information Science Programming	
<b>Substitutions with Advisor Consent</b>			
3		GEOG 446 Land Use planning	
3		GEOG 492 Internship	
3		GEOG 494 Special Topics	
3		<i>GEOG 402 or 502 Qualitative Research Methods</i>	
3		GEOG 697 Directed Studies	
3		<i>PBACC only: GEOG 680 Seminar in Geospatial Techniques</i>	
<b>TOTAL units (minimum 23 units at 400/500-level)</b>			
<b>Approved By:</b>			<b>Date</b>

Comments: