

OREGON STATE UNIVERSITY
Geographic Information Science Certificate Program
GRADUATE Certificate Requirements Checklist

[F] = fall, [W] = winter, [Sp] = spring, [Su] = summer, [DE] = distance ed.

Background Courses:

- _____ Minimum mathematics: MTH 112, or equivalent high school or university course(s)
- _____ Basic statistics: ST 201/ST 202, or ST 351/ST 352, or ST 511/512 or ECE 353 (for engineers)
- _____ GEO 360, Cartography (4) [F], or equivalent experience

Required Core Courses: (8 credits):

- _____ GEO 544, Remote Sensing of the Environment (4) [F]
- _____ GEO 565, Geographic Information Systems and Science (4) [W] or [F, W, Sp, Su DE]

Elective Courses: (at least 11 credits chosen from below):

- _____ CE 513, GIS in Water Resources (3) [Sp]
- _____ CS 549, Selected Topics in Information-Based Systems (1-5) [occasional]
- _____ CSS 568, Soil Landscape Analysis (4) [Sp] [may be 668 in future and DE field class]
- _____ FOR 520, Advanced Aerial Photos and Remote Sensing (3) [F] [alt even]
- _____ FOR 521, Spatial Analysis of Forested Landscapes (3) [F] [alt odd]
- _____ GEO 541, Spatial-Temporal Variation in Ecology and Earth Science (4) [F][alt odd]
- _____ GEO 545, Computer-Assisted Cartography (3) [W]
- _____ GEO 546, Advanced Landscape Ecology (3) [W]
- _____ GEO 560, Multimedia Cartography (4) [Sp] [alt even]
- _____ GEO 566, Digital Image Processing (3) [W] [alt odd]
- _____ GEO 580, Advanced Applications of GIS in the Geosciences (4) [Sp]
- _____ GEO 585, Advanced Techniques in Remote Sensing and Digital Image Processing (3) [Sp] [alt odd]
- _____ HORT 514, Information Systems in Agriculture (4) [W]
- _____ OC 678, Satellite Oceanography (3) [Sp] [alt even]
- _____ RNG 550, Landscape Ecology and Analysis (3) [W]
- _____ ST 565, Time Series and Spatial Statistics (3) [alt even]
- _____ FOR or GEO 510, Internship (3 or more credits) [any term, as per consultation with advisor]

The elective courses may be in one of three tracks. Typical tracks are listed below as EXAMPLES, and are not exhaustive of all possible combinations of courses.

Cartography	GIS	Remote Sensing
FOR 520	FOR 521	FOR 520
GEO 545	GEO 580	GEO 566
GEO 560	HORT 514	GEO 539
GEO 566	CE 513	OC 678

Updated October 23, 2007