

# UNIVERSITY OF MISSOURI UNDERGRADUATE GIS CERTIFICATE PROGRAM PROGRAM OF STUDY

Student name: \_\_\_\_\_

Student Number: \_\_\_\_\_

Degree program: \_\_\_\_\_

Anticipated graduation date: \_\_\_\_\_

Email address: \_\_\_\_\_

**Instructions:** This form should be initiated by the student at the time he/she begins the undergraduate certificate program. The director of the graduate certificate program maintains the original copy in a file for the student. As courses are completed, grades are entered on the form. When the student prepares to complete all required coursework for the certificate program, the director of the GIS Certificate Program must be notified (at least one month prior to the end of the semester in which the student will graduate).

A student must complete a minimum of **15 hours** of approved coursework, and must earn a grade average of at least **B (3.0)** in these courses. Four courses must be successfully completed, with at least one course selected from each of three groups: Foundation courses (Group A), Theoretical breadth courses (Group B), and Technical breadth and Application courses (Group C). In addition, a student must complete an Independent GIS Project (3 hours) in consultation with a GIS faculty member, or complete a fifth course from the GIS curriculum.

**Coursework checklist**

**Group A** (*Foundation courses, one from this group*)

|           |   |       |       |
|-----------|---|-------|-------|
| GEOG 3040 | Intro to Geographic Information Systems (3 cr)        | _____ | _____ |
| NATR 4325 | Introduction to Geographic Information Systems (3 cr) | _____ | _____ |

**Group B** (*Theoretical Breadth courses, at least one from this group*)

|                       |  |       |       |
|-----------------------|--|-------|-------|
| GEOG 4710             | Spatial Analysis in Geography (3 cr)               | _____ | _____ |
| FOR 4360              | Forest Information Systems (Photogrammetry) (3 cr) | _____ | _____ |
| GEOG 4810 (NATR 4385) | Landscape Ecology and GIS I (3 cr)                 | _____ | _____ |
| GEOG 3840             | Cartography (3 cr)                                 | _____ | _____ |
| GEOG 3830             | Remote Sensing (3 cr)                              | _____ | _____ |
| GEOG 4740             | Location Analysis and Site Selection               | _____ | _____ |
| GEOG 4790             | GIS for the Social Sciences (3 cr)                 | _____ | _____ |

**Group C** (*Technical Breadth and Application courses, at least one from this group*)

|   |  |       |       |
|---|--|-------|-------|
| GEOG 4940   | Geographic Information Systems II (3 cr)         | _____ | _____ |
| NATR 4320   | Watershed Modeling using GIS (3 cr)              | _____ | _____ |
| <small>(same as EnvSci 4230/ BiolEng 4350/ CivEng 4720)</small> |  |       |       |
| NATR 4365   | GIS Applications (3 cr)                          | _____ | _____ |
| GEOG 4130   | Geospatial Sciences and National Security (3 cr) | _____ | _____ |
| GEOG 4850   | Transportation Geography                         | _____ | _____ |
| GEOG 4860   | Advanced Remote Sensing (3 cr)                   | _____ | _____ |
| ATMS 4510   | Remote Sensing for Atmospheric Science           | _____ | _____ |

**Capstone experience** (*or substitute 1 additional course from above*)

|           |                                |       |       |
|-----------|--------------------------------|-------|-------|
| GEOG 3385 | Independent GIS project (3 cr) | _____ | _____ |
| NATR 3350 | Independent GIS project (3 cr) | _____ | _____ |

\_\_\_\_\_

Total hours \_\_\_\_\_

This program of study has been successfully completed.

\_\_\_\_\_  
GIS certificate director's signature                      date