GIS 5530: GIS Internship
Registration Instructions

You can earn credit for an approved GIS internship by undertaking the following steps:

1) Secure an internship that involves the implementation of GIS as it primary focus.

2) Identify a faculty sponsor for your GIS internship from the MGIS Graduate Faculty.

3) Discuss the details of your internship with your MGIS faculty sponsor using the *Student/Faculty Contract* as a guide, e.g., determine how many credits will be earned and what work will be submitted for credit.

4) Complete the form, sign and date it, and acquire your faculty sponsor's signature.

5) Submit the form to Susanna McMaster in order to acquire a permission number to register for internship credits.

Please feel free to contact Susanna McMaster or the current DGS for more information about the GIS internship option.

GIS 5530: GIS Internship — Student/Faculty Contract

Student Information

Student name: Michael Felzan — ID#: 5611583

Degree program: MGIS — College: Twin Cities Campus

MGIS Faculty Sponsor Information

MGIS Faculty name and title:

Department: Geography, Environment & Society — E-mail: runck014@umn.edu

Internship Information

Semester (check one): ☐ Fall ☑ Spring ☐ Summer — Year: 2022

Credits (1-3): 1 credit

Internship title: *Examining the extent which differing algorithms used in spatially summarizing soil components vary the reporting of soil water holding capacity.*

Internship description (i.e., your learning objectives and proposed activities.):

The objective of this project is to identify how SSURGO calculates soil water holding capacity (which spatial interpolation algorithm is used to summarize soil components over space) from gSSURGO soil data. This project is also intended to explore the extent at which water holding capacity values would differ given the use of other spatial interpolation algorithms.

Results to be evaluated (e.g., written paper, journal, informational interview, presentation, portfolio):

This intenship project will involve the completion of a formal lab report, a 20-30 minute presentation in front of associated GEMs staff, and possible work to publish findings in an academic journal. All of the deliverables of this project will be produced and reviewed within the first weeks of the internship, so that work on a new project during this same GIS 5530 semester may begin.

Due date for evaluation materials: *First project presentation date: Feb 15*
Second project presentation date: March 15
Third project presentation date: April 19
(Materials for each individual are expected to be submitted around the date of presentation; final deliverables due at end of semester

On-site supervisor information

Name and title: Bryan Runck, Vasudha Sharma, Paul Senne (Project Supervisors)
Organization: UMN; GEMS
Address: 1994 Buford Ave, St Paul, MN 55108
E-mail: runck014@umn.edu
Phone: (507)381-6993

Signatures

Student	2/7/2022 Date	Director of Graduate Studies	2/7/2022 Date
MGIS Faculty sponsor signature	2/7/2022 Date		