

Proposed Certificate in:

Program:

Prepared by:

Section 1: Description of the Proposed Certificate

The proposed certificate, _____, is a _____-session, _____(online or in-person) based certificate course hosted by the _____ (program). All classes will be _____ hours in length, _____ evening per week starting the _____ semester. Due to the program's length and compact nature, neither a teach-out plan nor any credit transfer policies need to be defined.

The certificate would be given on an ongoing basis, approximately _____ per calendar year with a target start date of _____. The certificate will be staffed by internal faculty or external instructors.

The _____ certificate will target individuals who are interested in *(give details of target audience and why this certificate is of interest)*

To complete the certificate, students must attend all sections (with one allowed absence), participate, and complete a number of assignments.

Section 2: Rationale: What is the RATIONALE for the program

Section 3: Please summarize the DATA that SUPPORTS THE NEED for the proposed certificate.

Section 4: Market Research & Proposed Marketing Plan

(Update to include information relevant to your proposed certificate)

In terms of marketing this program, the goal will be to find individuals who fit the criteria above via online promotion, our alumni network, and partner companies. (Please provide additional information regarding your planned marketing)

Our online marketing will focus on traditional platforms such as Instagram, Meta, LinkedIn, and Google but will also include advertising campaigns on industry specific websites. On the ground marketing, such as online or in-person info sessions for prospects, promoting the certificate at events and email marketing will also be undertaken.

Section 3: Learning Objectives of the Certificate and Curriculum Details

Section 4: Proposed Certificate Program Syllabus

A high-level syllabus for the certificate and the relationship to the learning objectives above is provided below.

EXAMPLE: Course Curriculum:

Session 1: Essential Knowledge:

- Pandas (dataframes)
- Python basics (Loops, Functions, classes, modules),
- Python IDE: Visual Studio Code and Jupyter
- GIS background: Earth, and Coordinate Reference Systems.

Session 2: Spatial Operations

- Utilizing Geopandas, spatial joins, geocoding.

Session 3: Open-source Geospatial Analysis

- Techniques for data aggregation, quality checks.
- Interactive Mapping: Streamlit, Folium, xarray, Kepler GL & Jupyter Lab.

Session 4: Geo Database

- Spatial Data Models
- Database design & management.

Session 5: Geo Analysis and Machine Learning

- Applying ML models to geospatial data.