

# M.S. Applied Geospatial Sciences

Northern Arizona University  
Department of Geography, Planning and Recreation  
(rev 16 October 09)

## PRACTICUM PROJECT GUIDELINES

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The practicum topic and requirements are initially determined by the practicum advisor and the student, with additional consultation from other practicum committee members. Final approval is made the practicum committee as a whole. Four basic requirements must be included:

1. There must be a formal (physical) practicum product in the form of a report, article or paper.
2. The practicum must be presented at a public forum, similar in manner to that of a thesis presentation.
3. The practicum must be defended, similar in manner to that of a thesis defense.
4. The practicum should be equivalent in work to a thesis.

The practicum product is a written document, though it may be supplemented with non-written documentation of the student's work. The written will have due dates and a general format similar to those of the thesis, including:

1. A cover page formatted as in a thesis which shall be signed by the practicum committee.
2. An abstract page
3. A references section at the end
4. A complete copy, including all appendices, that will be filed in the Department.
5. Additional bound copies are often required for the committee members – please inquire. Appendices need not be attached to these copies if they are extensive.

In addition, the practicum must include:

1. A "Letter of Significant Contribution" from the on-site practicum supervisor. This will be placed on the page after the abstract page.
2. A detailed time log showing the total number of hours spent on the practicum work. This will be placed as an appendix.
3. Additional appendices. In most instances, there will be a substantial technical appendix demonstrating the student's work effort.

The ***Practicum Product Agreement Form*** must be on file before the student begins the practicum work.

## **Types of Practicum Experiences**

The following are examples of a *Basic Research Paper* practicum and an *Applied Research Report* practicum. With the approval of the student's committee, the practicum product may take different forms than presented in these two examples. The guiding principal in committee deliberations is that the effort and educational outcome should be comparable to that of a thesis.

### **1. A Basic Research Paper Practicum shall include:**

- a. The results of a professional internship experience or an independent study and analysis, similar to a thesis.
- b. A final paper that is ready in content, format and presentation for submission to an academic peer-reviewed or a professional technical or trade journal.
  - i. The paper will demonstrate an appropriate theoretical context, literature review, methodology, and conclusions.
  - ii. A detailed set of sample data sets, correspondence letters, meeting notes, and similar research material shall be included in the appendices.
- b. Submission of the paper (not the full practicum document) to a peer-reviewed journal.
- c. A final presentation and an oral defense of the research to the practicum committee and general public, which includes a reflection of the results and what was learned.

### **2. An Applied Research Report Practicum shall include:**

- a. The results of a professional internship experience.
- b. A written report that details the goals, process and outcomes of the project. Incorporated within the report, the student will critically reflect on the project, its theoretical context, its application and usefulness, its methodology, and its conclusions. Specifically, the report shall include:
  - i. A literature review consisting of academic and applied work related to the project, providing a historical and theoretical context to the applied research project.
  - ii. A chronological journal that documents the process of the project from beginning to end.
  - iii. A detailed set of sample data sets, correspondence letters, meeting notes, and similar project material, as appropriate, shall be included in appendices.
- b. A final presentation and oral defense of the project to the practicum committee and general public, which includes a reflection of the results and what was learned.