Guidelines for
PhD in Industrial Heritage and Archaeology
Graduate Students

This document provides some information about Program requirements as well as some guidance about administrative procedures of the Graduate School. Additional important information can be found online at the Graduate School website http://www.admin.mtu.edu/rgs/graduate/.

General Considerations
The PhD in Industrial Heritage and Archaeology is conceived as an interdisciplinary, research-based degree. As an emerging field, it does not fit neatly into the conceptual frameworks of existing disciplinary degree programs, though it must comply with traditional standards of intellectual and academic rigor, as well as the requirements of the University. Students will be expected to develop competencies in research as well as formal and substantive bases of knowledge in multiple disciplinary areas. They will conduct original research in problem areas identified in consultation with faculty committees, secure financial support, define rigorous data collection and analytical schemes, and generate solutions that satisfy established procedures.

In most instances, student research agendas will cohere with, or arise from the needs of sponsoring organizations. Because heritage problems do not exist in theoretical vacuums, linkage with real-world sponsors and problems will drive many, if not most student projects. This linkage should serve to involve students in the critical business of proposal writing, sponsor negotiations, and budget generation, as well as providing sources of financial support.

The PhD in Industrial Heritage and Archaeology is a logical extension of the existing MS in Industrial Archaeology offered by this department. Where the MS is perceived as a professional degree, preparing students for work in the heritage management field, the PhD should add a significant degree of intellectual maturity and depth to the candidate. It should allow the degree holder to make theoretical contributions to the development of the field, to take a higher level of responsibility in management and/or academic positions, and/or to teach at the University level. As such, students pursuing the PhD may find it desirable or necessary to take courses offered in the MS program to flesh out their curriculum, especially when these courses fill gaps in the students' previous preparation.

Advisor/Committee
At the start of the first semester of residence, the IA Program Committee assigns each new student an interim advisor. By the end of the second semester in residence students should select an Advisor and Guidance Committee, in consultation with the initial advisor and/or the Department Head, and should file the appropriate form with both the Director of IA Graduate Studies and the Graduate School Office (GSO Form D4A). The Advisor serves as the chair of the student's Guidance Committee, which should include two other faculty
members. The Advisor and Committee will design an individualized course of study, based upon the student's background and goals, and will supervise the conduct of research and/or internship.

The Guidance Committee, with the addition of one member of the Graduate Faculty from a department other than Social Sciences, will form the examining committee for the student's dissertation. During a student's academic career, it may be desirable to adjust the membership of the Guidance Committee to reflect the specific needs of a student, especially in light of a chosen thesis topic; any changes in the Committee must be registered with the departmental Director of Graduate Studies.

**Degree requirements**
The PhD in Industrial Heritage and Archaeology requires a minimum of 45 credit hours beyond the MS, including about 30 credits of coursework and/or directed study and 15 credits of dissertation research. This is envisioned as a research degree, so students are not expected to pursue significant numbers of traditional courses in common. Rather, individualized programs of study are to be developed by the student and his or her Guidance Committee.

**PhD Core Courses**
**SS 6010 Topics in Industrial Heritage (up to 12 credits)**

**SS 6020 Topics in Industrial History (up to 12 credits)**

**SS 6500 Individual Study/Directed Reading**

**SS 6600 Dissertation Research**

**SS 66XX Professional Practicum TO BE ADDED (9 credits)**
Serves as a vehicle for gaining teaching experience, professional internship with government, archival, or non-profit organization. Can be repeated.

In addition, graduate courses from the MS Program list below or selected upper division undergraduate classes can be elected, with the approval of the Guidance Committee. These are particularly appropriate for students who did not complete the MS degree in this department.

Most students will complete the PhD program in three to four academic years, making maximum use of summers to conduct research. First year students will typically take nine credits each semester, though it is possible to do more. The Guidance Committee may require students judged deficient in some particular area, such as American history or archaeology, to take additional courses, even undergraduate courses, to bolster their background.

**MS Core Courses**
**SS 5500: IA Proseminar I History of Technology (3 credits)**
A course designed to explore the principles, problems, and interpretive themes

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that have guided the work of historians of technology. Students will be asked to prepare several essays based on secondary sources and focused both on historiographic and substantive issues. (Fall Semester)

**SS 5501: IA Proseminar II  Industrial Communities (3 credits)**
Provides an overview of the ethnography and social history of industrial communities, with a focus on company towns and cross-cultural comparison. Particular attention is placed on topics of work, gender, class, and ethnicity/race. Methodologies covered include: oral history, ethnography (including interview techniques), and ethnohistory. (Fall Semester)

**SS 5502: IA Proseminar III  Historical Archaeology (3 credits)**
Directed readings in the methods, theories, and practice of historical archaeology. Particular emphasis is given to the current literature, though a review of the development of the discipline is also included. (Spring Semester)

**SS 5503: IA Proseminar IV  Material Culture Studies (3 credits)**
Explores techniques for interpreting the past as it is embodied in material culture. Emphasis is placed on reading artifacts, structures, and historic sites to learn about the people, place, and time that produced them. Particular attention is paid to the evolution of materials, processes, and styles. (Spring Semester)

**SS 5600: Industrial Archaeology (3 credits)**
Seminar with readings in Industrial Archaeology, in addition to a lecture-based class. Regional case studies provide a central focus. Research paper based on primary evidence is the major class product. (Fall Semester)

**SS 5800: Documentation of Historic Structures (3 credits)**
Practical experience in recording standing structures. Techniques include measured drawings, architectural photography, primary research, and written descriptions. Students will learn to use the documentation process to analyze historic structures. (Fall Semester)

**SS 5900: Heritage Management (3 credits)**
Study of the range and variety of cultural resources, with emphasis on industrial or industrially related sites. Consideration of philosophies, policies, ethics, and laws related to historic preservation and CRM. (Spring Semester)

**SS 5700: Field Archaeology**
(Variable credits, typically 3–8 credits; minimum 3 credits required)
Practical experience in the methods and techniques of field archaeology. Background readings are followed by participation in site survey, testing, excavation, and record keeping. Students learn through their involvement in ongoing research projects. (Summer Semester)

Students who have had extensive training in field archaeology may petition to waive the SS 5700 requirement, but must either take some other type of field
methods course, or carry out fieldwork as part of an internship. Requests to waive SS 5700 (or any course) should be submitted through the student's Guidance Committee to the departmental IA Graduate Committee.

Approved Electives
The Department of Social Sciences and other departments at Michigan Tech offer courses that contribute to the students’ intellectual and professional development. In consultation with their advisor and/or Guidance Committee, students will develop a program including at least one approved elective that contributes to their course of study. Examples of appropriate electives include courses in Architectural History, The Copper Country: Miners and Managers, Geographic Information Systems, and Geophysics for Archaeologists. Other relevant 3000 and 4000 level courses in the Social Sciences may also be considered. Students wishing to focus on a particular topic not covered by an existing course may take SS 5010, by arrangement with an instructor.

SS 5010: Directed Study (variable to 4 credits)
Directed readings or research conducted under the direction of a member of the graduate faculty. May be repeated for a total of 9 credits. Students must meet with their supervising instructor and receive approval of their study plan before registering. Prerequisite: permission of the instructor.

SS 6002 Research Design
SS 5550 Global Environmental History
SS 4001 History of Social Thought
SS 4010 Social Science Methods
SS 4100 American Indian Political Issues
SS 4200 Environmental Anthropology
SS 4220 Method & Theory in Archaeology
SS 4390 Seminar in Sustainability Issues
SS 4405 Geophysics for Archaeology
SS 4500 Historiography

In addition to the courses listed above, students may enroll in 5010 Directed Study, and attend a 3000-level course, by arrangement with their advisor and the course professor. Additional expectations will be placed upon Ph.D. students enrolled in these courses. Possible classes include, but are not limited to:

SS 3110 Food Systems
SS 3220 Archaeological Sciences (with Lab)
SS 3240 Reading the Landscape: Anthropology, Geography, History
SS 3260 Latin American Cultural History
SS 3270 Archaeology of the African Diaspora
SS 3512 Building America: The History of Planning, Engineering, and Development in the United States
SS 3515  History of American Architecture
SS 3500  Modern American History
SS 3530  The Automobile in America
SS 3540  History of Michigan
SS 3541  The Copper County
FW 3540  An Introduction to Geographic Information Systems for Natural Resource Management
SS 3551  Europe in the Modern Era
SS 3580  Technology and Western Civilization
SS 3700  Industry and Society
SS 3801  Science, Technology, & Society
SS 3810  Anthropology of Science and Technology
SS 3890  Industry and the World Economy
SS 3910  Histories and Cultures
SS 3920  Topics in Anthropology/Archaeology

Full descriptions of these courses are online here:

Examinations and Competency Areas

Each student will identify, in consultation with their Guidance Committee, three areas of competency for their Comprehensive Examinations. All students will be examined in the general area of Heritage Studies, with a particular specialization, such as Heritage Management or Global Heritage Programs, to be identified by the student and Guidance Committee. The additional two competency areas are to be drawn from lists generated by the Program Committee, one a disciplinary list, and the other a topical/regional/thematic list. Deviations from the lists may be approved by petition to the Committee.

Tentative Competency Area Lists:

**Disciplinary**
History of Technology
Industrial Archaeology

**Topical/Thematic/Regional**
Environmental History
Built Environment
Cultural Landscapes
Labor History
Historic Preservation
Material Culture
Museology
Archives Management
Arctic Heritage
Public History
Western United States, Latin America, Europe, Africa or other geographic or cultural region.

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The student will prepare comprehensive bibliographies for each of the chosen competency areas, to be approved and/or modified by their Guidance Committee prior to scheduling examinations. Comprehensive Examinations will consist of two sections, written and oral, scheduled during a two-week period. Students will answer one or more substantial written questions in each competency area over a three–day period. The Guidance Committee will grade exams and the oral examinations scheduled to follow within one week. Orals may consist of two elements: elaboration/clarification/correction of written answers and/or questions on new material or topics drawn from the comprehensive bibliographies.

**Dissertation Research (15 Credits)**

Each student will prepare a research thesis under supervision of an advisor and committee. The thesis shall be based upon original research, either field or archival. Students receive thesis credits by registering for SS 6600, Dissertation Research. During the second year of residence, each student will prepare a detailed written proposal describing the thesis project. The format for the proposal can be derived from proposal guidelines published by the National Science Foundation and/or other prominent granting agencies, and should include, at minimum, problem statement, literature review, research plan and detailed bibliography. The proposal must gain approval by the student’s Guidance Committee. A committee of four faculty (the student’s Guidance Committee and one additional Graduate Faculty member from another department) will examine the completed thesis. The Graduate School has additional instructions and requirements for thesis preparation and defense that can be found on the Graduate School web pages.

**Presentation of Colloquia**

Formal presentations of research results are an important element of a student’s professional development. In order to encourage this development, we require that each student make at least two presentations to a department colloquium on topics of the student’s choice. These presentations should take place during the second and third years of residence, part of a series scheduled by the Department and used for presentations by faculty and visitors, as well as students. Topics might include subjects drawn from thesis research, from class projects, from visits or internships, or simply from current topics of interest in the field.

**Professional Development**

Ph.D. students are expected to develop a reputation as an emerging professional within this nebulous field, and the faculty are particularly interested in seeing students develop professional networks of international scope. To facilitate this, the faculty expect that students will join a major academic or professional society connected to Industrial Heritage, such as The Society for Industrial Archaeology (SIA), The International Committee on the Conservation of the Industrial Heritage (TICCIH), or The European Federation of Associations of Industrial and Technical Heritage (E–FAITH), or any of the partnering organizations. Students should become proficient with the cultures and
interests of practicing professionals around the world and the challenges facing industrial heritage communities. This will help them develop their own professional network, define their dissertation opportunities, and eventually find a job.