

PROGRAM SPOTLIGHT

Industrial Archaeology Master's Program, Michigan Technological University

LEADING THE WAY IN A DEVELOPING GENRE

JED WEISBERGER

Michigan Tech is home to the only master's program in industrial archaeology in the United States. Not only does the program offer students a unique course of study, it has brought the university recognition through unique contributions.

JED WEISBERGER is a staff writer for Peterson's.

AMERICA'S fascination with what **A**was—and might be again—is growing by leaps and bounds.

In almost every town, a relic of a past industrial or agricultural powerhouse exists. Perhaps there is an old iron forge. An abandoned steel mill occupies a large parcel of land. A railroad bridge, perhaps falling apart, spans a river with tracks on which no train has passed for decades.

All of these structures are studied in a unique way with a unique passion in the pursuit of a Master of Science degree in Industrial Archaeology at Michigan Technological University.

Since 1992, Michigan Tech, located in the Upper Peninsula town of Houghton, has been home to the

only such program in the United States and one of relatively few internationally.

Industrial archaeology is the recording, study, interpretation, and preservation of the physical remains of industrially related artifacts, sites, and systems within their cultural and historical contexts. Most studies focus on the early years of the Industrial Revolution and beyond, though there is a strong connection to earlier technologies.

Master's candidates in this Michigan Tech program, which emphasizes a multidisciplinary approach, fuse the academic perspectives of archaeology, historic preservation, history of technology, and anthropology. The program is housed in the university's department of social sciences.

"In Europe, studies in industrial archaeology are way ahead of what has been done in the United States," said Dr. Patrick Martin, the Director of Graduate Studies in Industrial Archaeology at Michigan Tech. "In the United States, such studies are just developing. Yes, we are unique, but we are also in a unique field that is developing."

Martin and his wife, Susan, also a member of the program's faculty, recently toured the Ruhr area of Germany, which was the industrial capital of that country for generations. Today, the situation has changed, and the Ruhr is a tourist attraction.

"Many industrial sites in that area have been turned into magnificent museums," said Martin. "It has become quite a tourist destination in Europe. I can see similar things happening in the United States."

A HANDS-ON COURSE OF STUDY

At Michigan Tech, during four semesters of supported study leading to a master's degree in this program, a student will spend some time in a traditional classroom, but many facets of learning will be experienced in the field.

Students from diverse engineering or architectural backgrounds, intrigued by the industrial past, are drawn to the program.

“We offer a curriculum that is hands-on,” said Martin. “I have received inquiries about studying in our program from a distance. I don’t think it can be done.”

Not when the classroom might be a foundry site in Cold Spring, New York, or a research site in the Porcupine Mountains State Park, at the site of the Nonesuch Copper Mine, in Michigan’s Upper Peninsula.

Both faculty and students in the program are in demand as towns, cities, or other entities awaken to the industrial history of their respective areas.

“A city obviously knows it has a building, say an old industrial factory,” said Martin. “It probably doesn’t know exactly how everything functioned or interacted at the site. That is where we come in. We help analyze the site and decide if a building can be restored or used as a museum or something else.”

Students participate in the analysis and, as a result, often find work quickly upon graduation. Others remain on the academic side, moving on to Ph.D. programs.

“We have been able to offer both,” said Martin of the approximately three dozen graduates of the program since 1993. “Our people, if they wish, are certainly able to find work. Those who wish to remain on the academic side, participate in research, or teach, are well prepared as well.”

This is due to a faculty of eight that has diverse interests and works closely with an average cohort of three. The largest cohort the program has had is eight; the smallest, two.

Each faculty member has his or her specialties. For example, Dr. Carol MacLennan’s work often includes the politics of industrial archaeology, while a major part of Dr. Bruce Seely’s research focuses on transportation, including the development of American highway systems.

Several have written, or are writing, books in their areas of specialty. Given this diversity, the program has a proposal on the table to offer a Ph.D.

“The proposal is in committee right now,” said Martin. “We are hopeful of its approval not too far in the future. Offering the Ph.D. would change the way we do some things, but not our mission.”

Support for the program’s off-campus projects comes from several sources. Grants from both government organizations, such as the National Parks Service, and private foundations fund the projects. A municipality may also hire the program’s faculty and students to participate in a project.

“We don’t really deal with a lot of large grants,” said Dr. Timothy Scarlett, who is involved in several field projects with Martin. “A lot of the projects we do can be done for \$40,000 and under.”

The program is also involved in documentation projects involving the Historic American Engineering Record.

THE CLASSROOM CAN BE ANYWHERE

Practical experience plays a major role in the program. A good example of this is the work the department is doing in conjunction with its Summer 2003 Field Schools.

One project concerns research at the site of the West Point Foundry in Cold Spring, New York, in the Hudson Valley about an hour north of Manhattan. The project at this site, the location of the largest ironworks facility in the United States between 1817 and 1884, is funded by the Scenic Hudson Land Trust on an ongoing basis.

The 2003 schedule provided for a field team to complete a total station-mapping project and begin excavations of selected areas, including both industrial and domestic components.

Another project was to initiate a new research project at the Nonesuch Copper Mine. The mine opened in 1867 and operated sporadically through 1885. The site includes machinery from the water-powered stamp mill and an array of domestic and industrial features.

The 2003 schedule called for the initial investigation of the site, with special efforts devoted to survey and testing.

“The Field Schools give our students, and others who join us (the program is open to others), excellent experience in several areas, including survey, excavation, photography, and mapping.”

Scarlett, having joined the faculty just over two years ago, enjoys the upbeat fellowship that has developed in the program.

“I guess you can call what we do a bit eclectic, and we draw students from an eclectic background,” he said. “We always have something going on.”

The program’s influence has been felt in work done to help restore a gristmill in southwestern Michigan and studies involving defunct steel mills in Bethlehem, Pennsylvania, and a study of a long-ago ironworks in Scranton, Pennsylvania.

“If a site is mentioned, there is a good chance we were there at some point,” said Martin. “Some cities have done an excellent job with preserving industrial sites. At other sites, in our analysis, we have to decide if a building or other structure is worth preserving.”

Some research opportunities are literally in the University’s backyard.

“Copper mining ended in the Upper Peninsula a long time ago—there is still some iron ore mining—but the area, and the people, are still feeling the effects,” said Martin. “Those are areas we are very interested in.”

Scarlett tells of a student’s special field request.

“I have one who is begging to do a field project in bridges,” he said. “I guess we will be putting one together.”

THE CENTER OF IT ALL

The Society for Industrial Archaeology was formed in Philadelphia in 1971, but moved its headquarters to the Michigan Tech campus in 1995 and is closely intertwined with the program. Martin edits the *Journal for the Society for Industrial Archaeology* for the group.

A forum on the working past in which people share knowledge as well as the interest and challenge of exploring the structures and sites of our industrial heritage, the Society also seeks to raise awareness among communities, public agencies, and property owners about the significance of preservation through continued or adaptive re-use of structures, equipment, and landscapes.

The Society promotes the study and preservation of the artifacts of technological development and change. The “archaeology” in its name signifies its principal concern with the tangible evidence of early industry.

The group also reaches across the United States for traces of the industrial past. Each year, in different cities or regions with a significant legacy of industrial activity, the Society holds its Annual Conference and Fall Tour.

Recent tours included trips to the Bethlehem, Pennsylvania area; Syracuse, New York; and Sarnia and Petrolia, Ontario. Recent conferences were held in Brooklyn, New York; Washington, D.C.; and Duluth, Minnesota.

The Society also sponsors Industrial Archaeology study tours, such as one recently to Great Britain and Germany.