

University of Alaska Board of Regents

Program Approval Summary Form

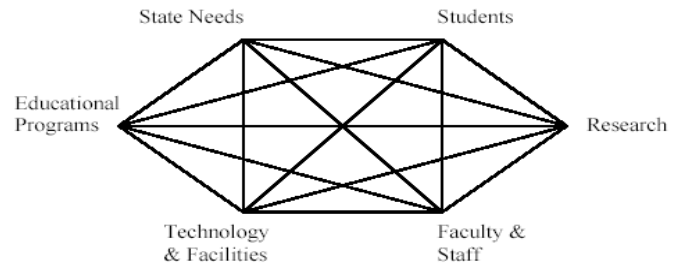
Requirements:

1. 2 pages or less
2. Must be a stand-alone document

MAU: UAF

Title: Graduate Certificate in
Construction Management

Target admission date: Fall 2009



How does the program relate to the Education mission of the University of Alaska and the MAU?

This proposed program is a 15 credit graduate certificate in construction management that will provide advanced training for graduate engineers and other professionals in the Alaskan construction workforce. The program was developed in close coordination with Alaska construction industry employers and envisions continuing that relationship with employers sponsoring courses, providing classroom space, and participating in an industry advisory committee.

**Who promoted the development of the program?*

The program developed from the convergence of three trends: 1. UAF engineering's goal of increasing graduate-level courses for working engineers; 2. the nationwide trend of graduate engineering programs to "package" their graduate offerings for particular industries; and 3. the Alaska Department of Transportation's (DOT) need to provide advanced training for its engineers and other professionals who are making decisions that affect the physical and economic well-being of Alaskans. In spring 2008, with the support of a Workforce Development Grant, UAF Civil and Environmental Engineering (CEE) led the offering of five one-credit special topics courses in Fairbanks and, via video conferencing, in Juneau and Anchorage. Other team members were the UAF School of Management, UA Corporate Programs (UACP), UAF Center for Distance Education (CDE); and UA Video Conferencing Services.

**What process was followed in development of program (including internal and external consultation)*

UAF CEE had a series of meetings with upper managers of interior Alaska construction organizations in spring and summer 2007. These meetings identified likely course topics and meeting formats used in the spring 2008 courses. In May 2008, UAF CEE sponsored a meeting in Anchorage of state-wide major employers and others interested in the workforce training of graduate engineers and construction managers, who endorsed the key elements of this proposed program.

**Impact on existing programs and units across MAU and system, including GERs.*

Most of the students will already be four-year college graduates and this program will assume that they have the basic general education requirements. Both UAA and UAF have associates programs in construction management and UAA has a bachelor's program. The proposed program is a graduate program that will allow the next step in a career pathway and fill a gap between the bachelors in engineering and masters degrees in construction management and related areas.

What State Needs met by this program.

**Information describing program need and why existing programs in UA system are not able to meet it.*

There is currently a nationwide shortage of engineers and technical mid-level managers in all technical fields. The shortage is acute for the construction industry in Alaska with its extreme seasonally, remote project venues, and transient workforce. The shortage is often more acute for Alaska governments with less flexible personnel policies. There is broad agreement that education that is specific to construction management can accelerate the learning cycle for newer engineers into management ranks. For example, about one-third of UAF CEE graduates go into construction directly, and most of the rest of them that stay in Alaska are involved in the construction project cycle. However engineering accreditation requirements make it difficult for them to take construction courses. They enter the difficult world of construction management lacking formal courses in contract and procurement law, construction planning and cost control, labor relations, and myriad other topics. In addition, most graduates need skills in communications special to the project environment, including dealing with the public.

Both UAA and UAF have graduate programs in engineering management, but not construction management, although some of the engineering management courses might be used in the proposed program. This program approaches a different demographic than the established masters programs, namely those college graduate students with several years of construction experience who are: primarily interested in construction, not attracted to the traditional MS programs, and with employers that will encourage participation in the new degree program.

*What are the **Student** opportunities and outcomes? Enrollment projections?*

This program is designed to reduce the students' time to obtain a credential and improve the students' current job performance and career expectations by offering courses that are specific to the industry needs. Offering the classes in venues convenient to the students invites employer participation. We expect that the typical class size will be 10 to 15 students and 5 to 10 students will obtain degrees each year.

*Describe **Research** opportunities:*

This is not a research program.

Describe Fiscal Plan for development and implementation:

**Identify funding requirement, sources and plan to generate revenue and meet identified costs:*

The overall funding plan is to approach self-support. The per credit charge will be double the standard tuition, with half going to CEM directly and half to UAF general tuition account (Fund I). Use of special tuition is warranted for this program, since it serves a special population and, generally, employers will sponsor most courses. UAF faces many demands on general fund dollars to support educational programs. Although there is demand for this program from the perspective of students and employers and significant state need, it does not have a high enough priority to compete for scarce state funds. Thus we propose to meet the needs by self support of the program. The employers will guarantee a minimum number of students. If there is capacity beyond that, students who do not work for that employer may register. Some courses will not be associated with an employer and will be "non-sponsored." The plan calls for administration of tuition and fees by UACP for corporate sponsors or CDE for individual students. The annual income, based on special tuition, offering 6 to 9 classes per year with 10 to 15 students would be \$35,000 to \$75,000. That, plus a workforce increment to the CEE budget should approach self-support, after the program is developed – two to three years.

**Indirect costs to other units (e.g. GERs, distance delivery)*

There should be no indirect costs other academic units. UAF SoM is participating in this as a partner of CEE, for SoM courses. The support of UA video conferencing is needed for classes

that are offered in two locations. In the past, there has not been a charge for this. Students may use Blackboard and library services, but the costs per student should be no more than for typical students.

➤ **Faculty and Staff*

UAF CEE needs another faculty member to help both with this program and other CEE construction management courses. The cost of this is approximately \$105,000/year. At some point, the program might need a half time clerical worker. CEM currently has budget for about half this amount. Program revenues could potentially help provide the other half. Program revenues will be needed for overhead expenses such as, start-up, administration, and travel.

➤ **Technology, Facilities and Equipment*

Generally, we plan to offer the classes in employer's locations or at other central off-campus locations. In general, fees for that venue would be paid by the course sponsor. In general, there should be no special charges for facilities or equipment. UA video conferencing has helped with IT for remote classes without charge.