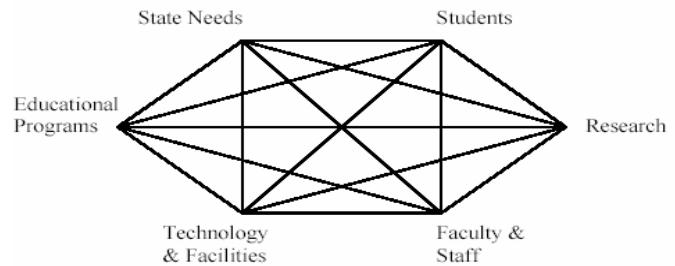


University of Alaska Board of Regents
Program Approval Summary Form

Kodiak College
University of Alaska Anchorage
Undergraduate Technology Career Specialty
Certificate Programs with certificates in
Welding, Construction Technology and
Industrial Safety Program Support



Target admission date: Spring 2007

Relation to the Education Mission of the University of Alaska and UAA

An important component of the Kodiak College mission is to provide quality education and training tools and opportunities for island learners in Kodiak. The addition of the **Undergraduate Technology Career Specialty Certificate programs** with three specialty certificates will serve an additional training need in Kodiak. The programs have core objectives aligned with the vocational and technical education mission of the University of Alaska Anchorage, which is to enhance, promote, and provide progressive training that prepares students for employment in high-growth, high-demand jobs locally and statewide.

Program development began in 2005 through the collaborative efforts of Industry Partners, Community Representatives, Kodiak College, University of Alaska Anchorage, and the Kodiak Island Borough School District. The new undergraduate certificates will offer education and training opportunities in welding, construction, occupational safety and health. Each undergraduate certificate offering includes components in Written Communication, Mathematics and Safety in addition to discipline-specific technical components to ensure academic quality and integrity.

State Needs met by this program.

The State of Alaska predicts significant growth in a variety of industrial areas throughout Alaska over the next ten years including Construction, Oil, Gas, and Mining. As a result, a well trained workforce is critical to successfully accommodate increased employment needs due to growth and employee retirement. The Undergraduate Technology Career Specialty Certificates will prepare Alaskans to meet future workforce and economic opportunities throughout the state of Alaska.

Student opportunities

Students enrolled in the Undergraduate Technology Career Specialty Certificate program may choose to pursue a certificate in welding, construction or occupational safety and health. The certificates are designed to prepare students to obtain employment, work productively and progress professionally in each of the subject areas. Employment opportunities in each area are strong in Kodiak and throughout the state and industry partners are looking forward to the arrival of program graduates in the workforce.

Student outcomes

Upon completion of the Undergraduate Technology Career Specialty Certificate, students will demonstrate skills in communication, computation, and human relation applicable to personal and professional situations, demonstrate and apply knowledge of math and computers to technical fields, and understand and apply industrial safety practices.

Students completing the Welding Certificate will demonstrate technical and administrative skills required in today's metal fabrication and welding environments; demonstrate application of specifications and welding procedures to specific job tasks; demonstrate skills in welding and thermal cutting processes and familiarity with basic metallurgical theory; demonstrate competence in all-position welding qualification tests for two welding processes and familiarity with other welding processes; demonstrate safe work

habits by assessing hazards and using best practices to avoid exposure to risk of injury, and to avoid damaging equipment.

Upon successful completion of the Construction Technology Certificate, students will demonstrate the ability to create, interpret, and use construction drawings and other documents and calculate quantities of material, labor, and equipment needed for projects; define the roles, relationships, and responsibilities of the participants in the construction process, understand employee relations and contract law and define structural theories and physical principles affecting structural behavior in building and civil works. They will define basic building systems, building equipment, materials, techniques and assemblies for construction; interpret standard building codes for application in modern construction processes; demonstrate familiarity with effective contract administration methods to control, organize, and monitor construction projects and apply knowledge of safety, health, and environmental issues related to construction activities.

Industrial Safety Program Support Certificate students will produce graduates that will successfully demonstrate the ability to identify risks to life, health, and property, and plan and implement strategies that prevent injuries; develop, implement, and manage safety programs that comply with government regulations, industry standards and best safety practices; design and maintain company and personnel records related to safety activities, and incidents; develop and implement a process of incident or injury investigation, properly collect, organize, and analyze appropriate information to link root causes with observed effects.

Estimated 5-Year Enrollment Projections:

Courses used in the certificate core and emphasis areas are shared with the AAS degree in Technology that has been offered at Kodiak College for a number of years. In the first year of operations the Welding emphasis will be offered, and each subsequent year a different emphasis will begin. The table below projects the number of enrolled and graduating students as the college offers the three emphasis areas on a rotating basis. Each student is expected to enroll in approximately 12 credits per semester.

Year	Student Enrollment	Estimated Graduates
06-07	14	0
07-08	26	14
08-09	24	12
09-10	26	12
10-11	26	14

Research opportunities:

Research opportunities are limited to those discoveries made by students in the workplace as they enter internships and familiarize themselves with the demands of the professions they choose.

Operational Plan for development and implementation:

The plan to offer the Undergraduate Technology Career Specialty Certificate program at Kodiak College reflects the college's interest in providing a high quality, relevant program that prepares Kodiak students for career opportunities in their location and throughout the state. The program recognized the realities of the community in its plan to provide core instruction in general education and technology areas, and to rotate the offering of emphasis areas that are in high demand nationwide. Regular faculty members at Kodiak College are available to teach general education and core subjects, but the college does not intend to hire regular faculty in the emphasis areas unless there is a strong and continuous demand. Careful consideration has been given to the distribution of responsibilities for course and program delivery. The plan described here accounts for all of the functions that are essential for program success.

Kodiak College intends to offer the undergraduate certificate programs with the support and collaboration of the following:

1. Kodiak College Director
2. Technology Coordinator (staff)
3. Kodiak College regular faculty and Instructional Council.
4. Kodiak College adjunct faculty.
5. UAA visiting faculty.
6. Kodiak industry advisory council.
7. Kodiak Technology Council
8. UAA Office of Academic Affairs
9. Distance courses in technology

These individuals and groups will attend to activities and decisions that ensure the quality and relevance of the program and promote a successful educational experience for enrolled students. Brief descriptions of those activities appear below.

Kodiak College Director

The director assigns and directs faculty and staff, provides resources, and has responsibility for approval of curriculum actions and for regular faculty, course and program evaluations. The director also is the final authority on student petitions, disputes and exceptions to policy.

Technology Coordinator

A staff coordinator has been assigned to the Technology certificate and degree programs. She coordinates community and industry needs with the educational programs and arranges for appropriate faculty and facilities for course delivery. She connects instructional faculty with content experts at UAA and assists them in obtaining advice, direction and materials for their courses. She also assists adjunct faculty with compliance with college standards and with the use of available technology. She is trained in student advising and assists in student recruiting in the high schools, and at the local and statewide levels. She coordinates with the existing student evaluation and placement processes to ensure appropriate student admissions and course placements. She gathers and compiles assessment data from internal and external sources and arranges for outcomes assessments and program reviews by the Technology Council.

Kodiak Faculty and Instructional Council

Besides teaching in the technology core, the Kodiak regular faculty, who make up the Instructional Council, oversee the creation and modification of courses and programs for the college. They link the Kodiak curricula to the faculty governance process, recommend policies and initiate curriculum. They also provide direction and support to adjunct faculty, advising and assisting them in course organization and recordkeeping and in the creation of course materials.

Kodiak Adjunct Faculty

Kodiak College employs well-qualified adjunct faculty in the technology discipline areas. Adjuncts with acceptable skills and qualification will teach both core and emphasis courses in the AAS and Certificate programs. They comply with standard college practices for instruction, student evaluation, course assessment, and recordkeeping. The College Director, with assistance from faculty with content expertise in the degree or certificate emphasis area, will evaluate adjunct faculty performance in technical areas.

Visiting Faculty

Kodiak College is committed to the use of visiting faculty members to provide instruction in areas where properly qualified faculty members are not available locally. Visiting faculty with content expertise in the degree and certificate emphasis areas (construction, welding and occupational safety and health) will serve on the Technology Council and will advise the director and the Instructional Council on curriculum,

assessment and faculty selection criteria. The College Director will work with the Deans and Directors from other campuses to determine appropriate workload and negotiate compensation for visiting faculty.

Kodiak College Advisory Council

Representatives from the community (normally 8 to 12 members) regularly meet to discuss local issues in higher education and to advise the college director regarding program needs and student performance. Their input was a powerful incentive behind the development of these certificates and the modification of the AAS degree in Technology. Their input will continue to be sought to help define program impacts and beneficial changes and to assist in student recruitments and internship placements.

Technology Council

This council will be convened by the College Director and will consist of (1) community members, (2) regular Kodiak faculty and (3) UAA faculty with content expertise in the emphasis areas. They will ensure program quality as they help determine course and program requirements, establish faculty qualifications and performance criteria in content areas, regularly review the curriculum, analyze assessment data, and contribute to program reviews. They will meet at least annually and report to the College Director and Kodiak Instructional Council.

UAA Office of Academic Affairs

Since support is sought from faculty with content expertise who reside at several UAA campus locations, the Office of Academic Affairs will assist with the communication and coordination that must occur among the deans who direct and assign those faculty members and among the departments where they serve.

Impacts on existing Technology and Facilities.

At this time, new facilities are not required to successfully offer the Undergraduate Technology Career Specialty Certificate programs. Kodiak College has an established partnership with the Kodiak Island Borough School District, which allows shared use of facilities. Additionally, Kodiak College will develop partnerships with local industry representatives to establish hands-on, job-site internship opportunities for students enrolled in the Technology program.

Library and Information Resources

Students admitted to UAA, regardless of their residence or location, have access to the full suite of texts, periodicals, scholarly journals and research services offered by the UAA/APU Consortium Library. Requests are filled from the UAA collections and through interlibrary loan services. They may be delivered electronically, by mail or by fax to any student enrolled in a UAA program. Collections in the technology disciplines are extensive and may be viewed from the UAA library website: <http://www.lib.uaa.alaska.edu/>.

Student Services

Essential services are provided to all students enrolled in classes at Kodiak College to ensure a successful academic experience. Students enrolled in the Technology degree or certificate programs will be assigned a departmental academic advisor to provide direct assistance and support. Services available at Kodiak College include access to and assistance with technology and email accounts, academic advising, enrollment services and financial aid assistance, career planning services, library and information services and disability support services. Students have the opportunity to use additional services which may include learning communities, limited health care, student organizations, organized intramural activities and other services. Enrollments in this program will easily be accommodated within existing services organizations and processes.

Fiscal Plan

The projected budget indicates the planned revenue and expenses associated with delivery of the new program. The full-time program coordinator, visiting and adjunct faculty make up the bulk of the expense. Base budget from the college will cover all program expenses that are not covered by tuition revenues.

Expense and Revenue Projections:

	FY07	FY08	FY 09
Expenses:			
Faculty assigned (%)			
Technology Coordinator	39,000	40,000	41,000
Adjunct Faculty (FY07-14CR/FY08-22CR/FY09-27CR)	13,860	21,780	26,730
Visiting Faculty	6,000	6,000	6,000
Total Personnel	58,860	67,780	73,730
Travel (visiting faculty)	6,000	6,000	6,000
Other direct expense (commodities, equipment)	9,000	9,000	9,000
Total Projected Program Expense	73,860	82,780	88,730
Revenue:			
Base budget for program operations	38,580	47,080	38,330
Estimated Tuition Revenue for Program	35,280	35,700	50,400
Total Projected Program Revenue	73,860	82,780	88,730

TECHNOLOGY, CAREER SPECIALTY UNDERGRADUATE CERTIFICATES

The Technology Career Specialty Certificates are offered only through Kodiak College.

The Technology Career Specialty Certificate programs provide entry-level skills in several specialized fields including Welding, Construction and Occupational Safety and Health.

Admissions Requirements

See certificate admissions requirements in Chapter 7 of the UAA catalog.

General University Requirements

Complete the General University Requirements for Undergraduate Certificates at the beginning of this chapter.

Undergraduate Certificate, Welding

Students develop technical skills in various welding processes including Shielded Metal Arc Welding, Gas Metal Arc Welding, Gas Tungsten Arc Welding and Plasma Arc Cutting. Students will also develop skills in metal fabrication and technical drawing. Upon completion of the Certificate, students are prepared for entry-level Welding Technician positions. (See outcomes for Welding Technology emphasis of the AAS degree.)

1. Complete the Certificate Requirements: 30-31 Credits

AET A101	Fundamentals of CADD for Building Construction	4
OR		
CIS A105	Intro to Personal Computers & Application Software	3
PRPE A108	Introduction to College Writing	3
HUMS A153	Human Relations	3
OR		
HUMS A155	Human Relations in the Workplace	3
MATH A101	Technical Math	3
OR		
MATH A105	Intermediate Algebra	3
OSH A101	Intro to Occupational Safety & Health	3
WELD A112	Shielded Metal Arc Welding	4
WELD A114	Welding of High Strength Steel	4
WELD A157	Technical Drawing for Welders	3
WELD A190	Selected Topics in Welding	3
TECH A295	Technical Internship	1

Undergraduate Certificate, Construction Technology

Students develop technical skills in auto CADD, building methods, codes and standards, structural systems, and construction project management. Upon completion of the certificate in construction, students are prepared for entry-level positions as Construction Professionals. (See outcomes for Construction emphasis of the AAS degree.)

1. Complete the Certificate Requirements: 33 Credits

CIS A105	Intro to Personal Computers & Application Software	3
MATH A101	Technical Math	3
OR		
MATH A105	Intermediate Algebra	3
PRPE A108	Introduction to College Writing	3
HUMS A153	Human Relations	3
OR		
HUMS A155	Human Relations in the Workplace	
CM A101	Fundamentals of CADD for Building Construction	4
CM A102	Methods of Building Construction	3
CM A123	Codes and Standards	3
CM A201	Construction Project Management	3
CM A231	Structural Technology	4
CM A205	Construction Safety	3
TECH A295	Technical Internship	1

CM A201	Construction Project Management	3CR
Contact Hours: 3 + 0		
Prerequisite: CM A101 and CM A102		
Special Fees.		
Examines construction project management methods and processes. Includes project delivery systems, contract agreements, contract general and supplementary conditions, and contract administration procedures.		
CM A205	Construction Safety	3CR
Contract Hours: 3 + 0		
Prerequisites: CM A201		
Examines safety and health practices for the construction industry. Includes developing and implementing construction project site-specific safety plans, analyzing the laws and regulations that govern safety, evaluating construction site hazards and environmental conditions, and incident investigation and reporting.		
CM A231	Structural Technology	4CR
Contact Hours: 2 + 4		
Prerequisites: CM A101 and CM A102		
Crosslisted with: AET A231		
Special Fees.		
Examines structural theory and the physical principles that underlie structural behavior. Includes the use of materials in a manner to maintain structural stability against the natural forces of gravity, wind, snow, and earthquakes. Covers connection detailing and code requirements for wood, steel, and reinforced concrete.		
ENGL A111	Methods of Written Communication	3CR
Contact Hours: 3 + 0		
Prerequisites: ENGL A109 with minimum grade of C or PRPE A108 with minimum grade of C		
Registration Restrictions: Appropriate score on English Placement Test, SAT, Verbal Section, or ACT English Test will waive the ENGL A109 or PRPE A108 prerequisite.		
Course Attributes: UAA GER Written Communication.		
Special Fees.		
Offered Fall and Spring Semesters.		
Instruction in composition of expository essays with emphasis on different techniques for organization and development. Documented paper required. Readings in some section may be coordinated with another discipline.		
HUMS A153	Human Relations	3CR
Contact Hours: 3 + 0		
Crosslisted with: PSY A153		
Special Fees.		
A survey of communication, problem solving, interaction, relationship, choice and change skills.		
HUMS A155	Human Relations in the Workplace	3CR
Contact Hours: 3 + 0		
Special Fees.		
A survey of communication, problem solving and interaction skills as applied to the world of work.		

