

# COLLEGES AND SCHOOLS

UAF colleges and schools offer programs leading to occupational endorsements, certificates and associate, bachelor's and master's degrees in the arts, sciences and professions. Doctoral programs are available in areas of particular strength, such as sciences and mathematics.

## Education

The School of Education prepares professional educators and counselors for Alaska's unique geographic, cultural and linguistic conditions. Course work and fieldwork in a broad range of undergraduate and graduate programs are available to students on the Fairbanks campus and by distance delivery to rural areas. Programs offered respond to recent standards developed by the Council for the Accreditation of Educator Preparation, formerly known as the National Council of Accreditation of Teacher Education, the Alaska Teacher, Student and Cultural Standards and the Council for Accreditation of Counseling and Related Educational Programs.

Undergraduate degree programs and postbaccalaureate endorsement programs lead to state of Alaska teaching certificates in elementary and secondary education. A postbaccalaureate K-12 special education program leads to State of Alaska initial teacher certification or an additional endorsement in special education. Our school counseling program leads to a State of Alaska Type C Special Services certificate. Our clinical mental health counseling program provides the course work required to be a licensed professional counselor in Alaska. Graduate degree programs leading to a Master of Education include school or clinical mental health counseling, elementary education, secondary education, special education, language and literacy, people, place and pedagogy, and online innovation and design.

School of Education staff and faculty work closely with colleagues at the CRCD campuses and school districts across the state to prepare well-qualified pre-service educators and to offer professional development opportunities to education and counseling practitioners. Faculty research focuses on issues related to Alaska Native people and communities, indigenous populations, cross-cultural contexts, place-based education, distance education, mental health and rural issues.

The School of Education advising office offers experienced, full-time personnel who provide advice about SOE programs on a drop-in or appointment basis and provide appropriate referrals for financial aid and other information that students and interns need. SOE rural grants, in partnership with rural school districts and UAF community campuses, provide various types of support for rural and Alaska Native students seeking to become teachers, counselors and school leaders. For more information, call 907-474-7341 or visit <http://www.uaf.edu/soe/>.

## Engineering and Mines

The College of Engineering and Mines includes the academic departments of civil and environmental engineering, computer science, electrical and computer engineering, mechanical engineering, mining and geological engineering, and petroleum engineering, and the research enterprise of the college, the Institute of Northern Engineering. INE houses the Alaska Center for Energy and Power, the Alaska University Transportation Center, the Mineral Industry Research Laboratory, the Petroleum Development Laboratory and the Water and Environmental Research Center.

CEM offers students a challenging academic experience that will allow them to contribute, compete and succeed in today's global economy. The college offers programs leading to undergraduate and graduate degrees in civil engineering, computer engineering, computer science, electrical engineering, geological engineering, mechanical engineering, mining engineering, petroleum engineering, and water and environmental science. In addition to these degree programs, concentrations in many areas, including Arctic engineering, are available. An engineering Ph.D. program is also offered.

The baccalaureate degree programs in computer science and civil, computer, electrical, geological, mechanical, mining and petroleum engineering are accredited by ABET.

CEM's academic programs provide a basis for advanced study or specialized careers. CEM students benefit from small class sizes through increased interactions with faculty and other students and excellent access to instructional laboratories. The college provides opportunities for undergraduate and graduate students to participate in research. Theoretical and practical hands-on knowledge, in tandem with discipline-related research, gives CEM students the expertise and training they need for their chosen career path.

CEM departments are active in outreach activities such as Engineering Week, the Alaska Summer Research Academy, the Alaska Native Science and Engineering Program, educational workshops, the fundamentals of engineering examination review course, and a range of short courses for the professional engineering community. Visit <http://cem.uaf.edu> or call 907-474-7730 for more information.

## Fisheries and Ocean Sciences

The College of Fisheries and Ocean Sciences is responsible for statewide academic, research and service programs relating to Alaska's marine and freshwater environments and fisheries.

For undergraduate degrees, CFOS offers a minor and a Bachelor of Arts in fisheries, a Bachelor of Science in fisheries and ocean sciences, and a minor in marine sciences. Fieldwork opportunities are available to undergraduate students through cooperating state and federal agencies, and internships are available with nonprofit and industry fishery partners. Undergraduate fisheries majors are prepared for graduate study or to enter management, private industry or other fields.

Graduate degrees offered by CFOS include Master of Science and doctoral degrees in oceanography, marine biology and fisheries, and a Master of Marine Studies. Students can also pursue studies in seafood science through the fisheries program. Graduate students prepare for careers in university research and education, or research or management with state and federal agencies and private industry. As part of their degree programs, graduate students conduct research in collaboration with faculty, often in remote locations around Alaska and beyond.

Education, research and extension work on freshwater and marine systems are conducted by the departments that make up CFOS. The Institute of Marine Science (<http://www.uaf.edu/cfos/research/institute-of-marine-scienc>), with major laboratory facilities in Fairbanks and Seward, focuses on oceanographic and marine biological research and graduate education. The Kasitsna Bay laboratory (<http://www.uaf.edu/cfos/about-us/locations/kasitsna-bay>), near Homer, is the site for coastal research on intertidal and subtidal communities. The Juneau Center (<http://www.uaf.edu/cfos/about-us/locations/juneau>) focuses on fisheries research and education. The Kodiak Seafood and Marine Science Center (<http://www.uaf.edu/cfos/about-us/locations/kodiak>)

is focused on research and extension work in seafood science and sustainable harvest technology. The Marine Advisory Program (<https://seagrant.uaf.edu/map>) offers public education and outreach statewide from its offices in Anchorage and coastal communities. CFOS also operates the oceanographic vessel *Sikuliaq*, a global-class research vessel designed to work in the ice-laden waters of polar regions. The *Sikuliaq* is based in Seward.

For more information, visit <http://www.uaf.edu/cfos/> or call 907-474-7210.

## Graduate School

UAF offers professional licenses, graduate certificates, master's degrees and the Doctor of Philosophy degree in a number of areas. The Graduate School also manages UAF's unique interdisciplinary program where students can work on individualized degrees related to current issues. See the graduate degree requirements and specifics on programs offered.

The Office of the Graduate School provides information and guidance for prospective and current graduate students, including orientation, teaching assistant training and several scholarship and fellowship programs. Information can be found at <http://www.uaf.edu/gradsch/> or by calling 907-474-7464.

## Liberal Arts

As one of the largest colleges at Alaska's research university, the College of Liberal Arts supports scholarship that furthers understanding of Alaska and the circumpolar region in a changing global context in addition to offering a classic liberal arts course selection. Extensive research and creative work inform our teaching to provide students with opportunities to become knowledgeable in and across the arts and humanities, Alaska Native and global languages, and social and behavioral sciences; to develop expertise in specific areas of concentration; and to participate in exciting research both as a graduate student and as an undergraduate. The college provides interdisciplinary learning opportunities beyond the classroom that foster responsibility, understanding of vital issues and commitment to place. Core curriculum courses provide breadth to the general education of all UAF undergraduates, while liberal arts undergraduate and graduate programs ground students in their disciplines. More information is available at <http://www.uaf.edu/cla/> or by calling 907-474-7231.

## Management

The School of Management is a global learning community where innovation in teaching, discovery and service prepares students for professional success that benefits our community, the state of Alaska and the nation. The school's programs include undergraduate degrees in accounting, business administration, economics, and homeland security and emergency management, as well as 10 undergraduate minors. Graduate degrees include a Master of Business Administration, a Master of Security and Disaster Management, a Master of Science in resource and applied economics, and a doctorate in natural resources and sustainability. The School of Management is accredited by the Association to Advance Collegiate Schools of Business (AACSB) International and is one of only 186 schools worldwide with an additional specialized accreditation in accounting.

Going beyond the classroom, SOM embraces experiential learning by encouraging students to be active participants in their education through involvement in student organizations, paid internships and events.

For more information visit <http://www.uaf.edu/som/> or call 907-474-7461.

## Natural Resources and Extension

Scientists, natural resources managers and policymakers are becoming more aware of the complexity and interrelatedness of society and the environment. Implementing sustainable natural resources decisions in contemporary society requires an interdisciplinary approach. Graduates of the School of Natural Resources and Extension use their academic training to facilitate the wise management of renewable resources. The undergraduate program in natural resources management integrates knowledge in natural sciences, policy, forestry, economics and human values to examine the sustainable use of natural resources and decisions regarding their management.

Graduate students may earn one of two types of master's degrees in natural resources management — one thesis-based and one project-based — and a doctorate in natural resources and sustainability.

Faculty and students conduct research through the Agricultural and Forestry Experiment Station, which includes research centers and experiment farms in Fairbanks and Palmer, the Forest Soils Laboratory in Fairbanks, and field sites around the state. SNRE developed its courses and programs in close cooperation with many university units, private industry, and local, state and federal agencies. These cooperative arrangements provide students with opportunities for fieldwork and internships in the degree options listed above, as well as in outdoor recreation, water resources management, park and wilderness management, geographic information systems, and research planning and administration. For more information visit <http://www.uaf.edu/snre/> or call 907-474-7188.

## Natural Science and Mathematics

The College of Natural Science and Mathematics offers undergraduate and graduate degrees in the physical and life sciences, statistics and mathematics. CNSM provides most UAF undergraduate courses in science and mathematics, including the baccalaureate core science curriculum and a variety of outreach programs. The college is known for its modern teaching technologies, access to professors and quality undergraduate student advising. CNSM also offers minors in each of its major disciplines.

Academic programs provide a foundation for professional careers or advanced study, and help students develop critical thinking and analytical skills. CNSM majors enjoy close working relationships with faculty and other students. The college provides opportunities for undergraduate and graduate students to work with faculty on research projects. Unique opportunities are available through UAF research centers and institutes, including the CNSM Division of Research, the Geophysical Institute, the Institute of Arctic Biology, the UA Museum of the North and the International Arctic Research Center. The fundamental knowledge gained through courses and by working on practical, discipline-related projects gives CNSM graduates the skills and experience they need to enter the job market or continue their education.

CNSM is home to the Biomedical Learning and Student Training program, Alaska Native Science and Engineering Program, and K–12 outreach programs, including the Science Potpourri, the Alaska Summer Research

Academy, Girls on Ice and GeoFORCE. In these and other programs, high school and university students work with CNSM faculty on original research projects aimed at improving the quality of life in Alaska.

At the graduate level, CNSM offers Master of Science and doctoral degrees in the natural sciences and mathematics. These advanced programs provide students with research opportunities in laboratory and field settings throughout Alaska. CNSM's doctoral programs provide opportunities for advanced study leading to academic and professional positions. In 2015, CNSM began a cooperative program in veterinary medicine with Colorado State University. For more information, visit <http://www.uaf.edu/cnsm/> or call 907-474-7608.

## Rural and Community Development

The College of Rural and Community Development focuses on the needs of nontraditional students, including students who seek skills and degrees suited to the economy and well-being of rural communities. CRCD promotes workforce preparation, economic development, lifelong learning and community development. CRCD campuses provide general and vocational-technical education at the occupational endorsement, certificate and associate degree levels, and baccalaureate degrees in rural development and child development/family studies, and a master's in rural development. In cooperation with the College of Liberal Arts and the School of Education, CRCD offers baccalaureate and graduate degrees in cross-cultural studies, education and social work as well as a Ph.D. in indigenous studies. CRCD also offers workshops, continuing education and short-term courses, developmental studies, credit for prior learning and other nondegree student services.

CRCD community campuses include Northwest (<http://www.nwc.uaf.edu>) (Nome), Kuskokwim (<http://www.bethel.uaf.edu>) (Bethel), Bristol Bay (<http://www.uaf.edu/bbc>) (Dillingham), Chukchi (<http://www.uaf.edu/chukchi>) (Kotzebue), Interior Alaska (<http://www.uaf.edu/iac>) (Fairbanks, which administers six centers throughout the Interior), and Community and Technical College (<http://www.ctc.uaf.edu>) (downtown Fairbanks).

CRCD serves nearly two-thirds of Alaska, encompassing 160 primarily Alaska Native Arctic, sub-Arctic and coastal communities. At least 16 indigenous languages are spoken in the region served by CRCD, and the economy spans subsistence hunting and fishing, small-scale village development and cooperatives, and large-scale international corporate development. The College of Rural and Community Development focuses on responding to students and partners to develop the economic and social well-being of Alaska Native communities and beyond. For more information, visit <http://www.uaf.edu/rural/> or call 907-474-7143.