



University of Alaska

Education and Training for Maritime, FY15

The University of Alaska is committed to preparing today's students for tomorrow, recognizing that tomorrow's careers require advanced skills, greater knowledge, and more flexibility than ever before. Specific to the maritime industry, the University offers career and technical training as well as advanced degrees. This inventory, updated on an annual basis, provides the locations of programs and degrees or certificates offered in FY15, which includes three terms: summer 2014, fall 2014, and spring 2015. Additional programs and courses may be added throughout the year that are not included in this inventory. Current information can be found by contacting a local campus.

The University of Alaska is unique in its offerings of education and training programs to assist in building a skilled workforce for the maritime industry:

- Core programs include vocational and technical training directly related to the maritime industry as well as bachelors and advanced education programs directly related to biology, logistics, and oceanography.
 - 11 Occupational Endorsements, 7 Certificates, 8 Associate Degrees, 10 Bachelor's Degrees, 1 Graduate Certificate, 7 Master's Degrees, and 4 Doctorates.
 - Additional information on maritime training can be found throughout this report.
 - 1,198 degrees were awarded to graduates in the core programs between 2010 and 2014.
- Support programs include the broader vocational and technical training and advanced degrees in such fields as accounting, business, engineering, and rural development.
 - 6 Occupational Endorsements, 14 Certificates, 26 Associate Degrees, 21 Bachelor's Degrees, 1 Graduate Certificate, 14 Master's Degrees, and 4 Doctorates.
 - Information on these programs can be located at: <http://www.alaska.edu/research/wp/ua/>.
- Approximately 33 percent of the maritime core and support programs have e-Learning components.
- Additionally eight campuses offered 145 maritime classes across 23 communities to 1,332 students who between them earned 1,446 credits and 244 continuing education units during 5,210 hours of instruction.
- The University engages in advisory councils to inform and guide education and training programs.
- The University has specialized capacities such as the UAF Institute of Marine Science, the Marine Advisory Program, the Kodiak Seafood and Marine Science Center, and the Kasitna Bay Marine Laboratory.

For more information, please contact:

Fred Villa, Associate Vice President
University of Alaska Statewide
Academic Affairs for Workforce Programs
fred.villa@alaska.edu
(907) 450-8008

Note: Data Supplied by the universities via UA Information Systems: UA Decision Support Database (RPTP.DSDMGR) FY15 in conjunction with UA Office of Workforce Development.
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Core Programs



Anchorage Campus, www.uaa.alaska.edu/

Maritime Related Programs, FY15				
Program	Degree	University	Location	Delivery
Advanced Welding	Occupational Endorsement Cert	UAA	Anchorage	Traditional
Biological Sciences	Bachelor of Arts	UAA	Anchorage	Traditional
Biological Sciences	Bachelor of Science	UAA	Anchorage	Traditional
Biological Sciences	Master of Science	UAA	Anchorage	Traditional
Coastal, Ocean and Port Engn	Graduate Certificate	UAA	Anchorage	Traditional
Global Log Supply Chain Mgmt	Bachelor of Business Admin.	UAA	Anchorage	Traditional
Global Supply Chain Mgmt	Master of Science	UAA	Anchorage	Traditional
Heavy Duty Trans & Equip	Associate of Applied Science	UAA	Anchorage	Traditional
Heavy Duty Trans & Equip	Certificate	UAA	Anchorage	Traditional
Logistics & Supply Chain Ops	Associate of Applied Science	UAA	Anchorage	Traditional
Logistics & Supply Chain Ops	Certificate	UAA	Anchorage	Traditional
Logistics & Supply Chain Ops	Occupational Endorsement Cert	UAA	Anchorage	Hybrid
Occupational Safety & Health	Associate of Applied Science	UAA	Anchorage	Distance
Weld & NonDestruct Test Tech	Associate of Applied Science	UAA	Anchorage	Traditional
Welding	Occupational Endorsement Cert	UAA	Anchorage	Traditional

Kenai Peninsula College, www.kpc.alaska.edu/KPC/

Maritime Related Programs, FY15				
Program	Degree	University	Location	Delivery
Welding Technology	Certificate	UAA	Kenai	Traditional

Kodiak Campus, www.koc.alaska.edu/

Maritime Related Programs, FY15				
Program	Degree	University	Location	Delivery
Welding	Certificate	UAA	Kodiak	Traditional

Mat-Su Campus, matsu.alaska.edu/

Maritime Related Programs, FY15				
Program	Degree	University	Location	Delivery
Commercial Refrigeration	Occupational Endorsement	UAA	Wasilla	Traditional
Refrigeration and Heat Technology	Associate of Applied Science	UAA	Wasilla	Traditional
Refrigeration and Heat Technology	Certificate	UAA	Wasilla	Traditional

Prince William Sound College, www.pwscc.edu/

Maritime Related Programs, FY15				
Program	Degree	University	Location	Delivery
Industrial Technology	Associate of Applied Science	UAA	Valdez	Hybrid
Industrial Technology	Certificate	UAA	Valdez	Hybrid



Fairbanks Campus, www.uaf.edu/

Maritime Related Programs, FY15				
Program	Degree	University	Location	Delivery
Biological Sciences	Bachelor of Arts	UAF	Fairbanks	Hybrid
Biological Sciences	Bachelor of Science	UAF	Fairbanks	Traditional
Biological Sciences	Doctor of Philosophy	UAF	Fairbanks	Traditional
Biological Sciences	Master of Arts in Teaching	UAF	Fairbanks	Traditional
Biology	Master of Science	UAF	Fairbanks	Traditional
Fisheries	Bachelor of Arts	UAF	Fairbanks	Hybrid
Fisheries	Bachelor of Science	UAF	Fairbanks, Juneau	Traditional
Fisheries	Doctor of Philosophy	UAF	Fairbanks, Juneau	Traditional
Fisheries	Master of Science	UAF	Fairbanks, Juneau	Hybrid
Marine Biology	Doctor of Philosophy	UAF	Fairbanks	Hybrid
Marine Biology	Master of Science	UAF	Fairbanks	Hybrid
Oceanography	Doctor of Philosophy	UAF	Fairbanks	Distance
Oceanography	Master of Science	UAF	Fairbanks	Distance



Juneau Campus, www.uas.alaska.edu/

Maritime Related Programs, FY15				
Program	Degree	University	Location	Delivery
Biology	Bachelor of Arts	UAS	Juneau	Traditional
Biology	Bachelor of Science	UAS	Juneau	Traditional
Diesel/Heavy Duty	Occupational Endorsement Cert	UAS	Juneau	Traditional
Diesel/Marine	Occupational Endorsement Cert	UAS	Juneau	Traditional
Marine Biology	Bachelor of Science	UAS	Juneau	Traditional
Marine Engine Room Prep	Occupational Endorsement Cert	UAS	Juneau	Traditional
Power Technology	Associate of Applied Science	UAS	Juneau	Traditional
Welding	Occupational Endorsement Cert	UAS	Juneau	Traditional
Welding Technology	Occupational Endorsement Cert	UAS	Juneau	Traditional

Ketchikan Campus, www.uas.alaska.edu/ketchikan/index.html

Maritime Related Programs, FY15				
Program	Degree	University	Location	Delivery
Marine Transportation	Associate of Applied Science	UAS	Ketchikan	Traditional
Marine Transportation	Occupational Endorsement	UAS	Ketchikan	Traditional
Maritime Multi Skilled Worker	Certificate	UAS	Ketchikan	Traditional

Sitka Campus, www.uas.alaska.edu/sitka/index.html

Maritime Related Programs, FY15				
Program	Degree	University	Location	Delivery
Fisheries Management	Occupational Endorsement	UAS	Sitka	Hybrid
Fisheries Technology	Associate of Applied Science	UAS	Sitka	Hybrid
Fisheries Technology	Certificate	UAS	Sitka	Hybrid
Fisheries Technology	Occupational Endorsement	UAS	Sitka	Hybrid
Welding Technology	Occupational Endorsement	UAS	Sitka	Traditional
Welding	Occupational Endorsement	UAS	Sitka	Traditional

Workforce Training

Highlights

- UAA Kodiak College launched a series of [vessel maintenance and repair](#) classes with input from local vessel operators.
- UAA Kachemak Bay Campus is working closely with their local marine trades association and has launched a [series of local classes](#) as has the UAS Ketchikan Campus.
- UAF Alaska Sea Grant (ASG) Marine Advisory Program, with a donation from Icycle Seafoods, established a new 40-hour [Seafood Processing Quality Control Training Program](#), as well as continuing the [Alaska Seafood Processing Leadership Institute](#), both offered at the Kodiak Seafood and Marine Science Center, and the [Alaska Young Fishermen's Summit](#).
- UAF Bristol Bay Campus and the ASG Marine Advisory Program offered fishermen training programs including net hanging, fishing business skills and [outboard maintenance and repair](#). This is the beginning of their development of an occupational endorsement in commercial fishing.
- UAS Ketchikan began offering a [Maritime and Multi-Skilled Worker](#) course.
- [Ammonia Refrigeration training](#), coordinated by the ASG Marine Advisory Program and taught by UAA Mat-Su Professor Dan Mielke, was offered both at Mat-Su College and at the Kodiak Seafood and Marine Science Center.
- UAS and ASG Marine Advisory Program developed a new [Boat Electrical](#) asynchronous course online to target commercial fishermen and all boaters.
- UAF Fisheries Division has enhanced their BA in Fisheries in partnership with the Rural Development Program.



Kachemak Bay Campus, www.kpc.alaska.edu/KPC/

Maritime Related Training, FY15						
Program	Hours	Credit/Noncredit/CEUs	University	Location	Delivery	
Aluminum Fabrication	34	Noncredit	UAA	Homer	Traditional	
Aluminum Fabrication	27	Noncredit	UAA	Homer	Traditional	
Arc Welding	128	4 Credits	UAA	Homer	Traditional	
Arc Welding	128	4 Credits	UAA	Homer	Traditional	
Arc Weld-Low Hydrogen Elect	128	4 Credits	UAA	Homer	Traditional	
Boat Construction Materials	3	Noncredit	UAA	Homer	Traditional	
Lines, Rigging and Gear	3	Noncredit	UAA	Homer	Traditional	
Marine Electronics	3	Noncredit	UAA	Homer	Traditional	
Marine Mechanical Systems	3	Noncredit	UAA	Homer	Traditional	
Marine Safety	3	Noncredit	UAA	Homer	Traditional	
Pipe Welding	128	4 Credits	UAA	Homer	Traditional	
What Makes a Boat Go?	3	Noncredit	UAA	Homer	Traditional	

Kodiak Campus, www.koc.alaska.edu/

Maritime Related Training, FY15					
Program	Hours	Credit/Noncredit/CEUs	University	Location	Delivery
ABYC Marine Electrical Certification	35	Noncredit	UAA	Kodiak	Traditional
AWS D1.1 Welding Certification	30	1 Credits	UAA	Kodiak	Traditional
AWS D1.1 Welding Certification	30	1 Credits	UAA	Kodiak	Traditional
Flux Cored Arc Welding	120	4 Credits	UAA	Kodiak	Traditional
FT Carpentry I & Weatherization Tech I	300	Noncredit	UAA	Kodiak	Traditional
Fundamental of CAD for Construction	90	4 Credits	UAA	Kodiak	Traditional
Gas Metal Arc Welding	120	4 Credits	UAA	Kodiak	Traditional
Gas Metal Arc Welding	120	4 Credits	UAA	Kodiak	Traditional
Injury Prevention and Risk Management	75	4 Credits	UAA	Kodiak	Distance
Intr. To Technological Principles	60	3 Credits	UAA	Kodiak	Traditional
Introduction to Industrial Hygiene	60	4 Credits	UAA	Kodiak	Traditional
Metal Fabrication	75	3 Credits	UAA	Kodiak	Traditional
Safety Program Management & Recordkeeping	45	3 Credits	UAA	Kodiak	Distance
Shielded Metal Arc Welding	120	4 Credits	UAA	Kodiak	Traditional
Steel Welding and Fabrication	75	3 Credits	UAA	Kodiak	Traditional
Welding of High Strength Steel	120	4 Credits	UAA	Kodiak	Traditional
Workplace Injury and Incident Evaluations	60	4 Credits	UAA	Kodiak	Distance

Mat-Su Campus, matsu.alaska.edu/

Maritime Related Training, FY15					
Program	Hours	Credit/Noncredit/CEUs	University	Location	Delivery
Introduction to Ammonia Refrigeration	30	3 CEUs	UAA	Wasilla	Traditional

Prince William Sound College, www.pwscc.edu/

Maritime Related Training, FY15					
Program	Hours	Credit/Noncredit/CEUs	University	Location	Delivery
Incident Command System	16	Noncredit	UAA	Valdez	Traditional
Marine Safety and Survival	45	1 Credit/7 CEUs	UAA	Valdez	Traditional
Marine Technology I	150	4 Credits/28 CEUs	UAA	Valdez	Traditional
Marine Technology II	150	4 Credits/20 CEUs	UAA	Valdez	Traditional



Bristol Bay Campus, www.uaf.edu/bbc/

Maritime Related Training, FY15					
Program	Hours	Credit/Noncredit/CEUs	University	Location	Delivery
Basic Welding	15	1 Credit	UAF	Dillingham	Traditional
Bristol Bay Fisheries: Harvesting, Processing and Marketing	15	1 Credit	UAF	Dillingham	Traditional
Business of Fish/Small Business Planning	15	1 Credit	UAF	Dillingham	Traditional
Fisheries Sanitation and HACCP	10	1 Credit	UAF	Dillingham	Traditional
Introduction to Aquatic Biology	45	3 Credits	UAF	Dillingham	Traditional
Introduction to Commercial Fisheries	15	1 Credit	UAF	Dillingham	Traditional
Introduction to Methods in Environmental Studies Reporting	45	2 Credits	UAF	Dillingham	Traditional
Introduction to Small Engine Repair: Outboard Engine Maintenance and Repair	15	1 Credit	UAF	Dillingham	Traditional
Introduction to Traditional Crafts: Net Hanging	15	1 Credit	UAF	Dillingham	Traditional
Introduction to Traditional Crafts: Net Mending	15	1 Credit	UAF	Dillingham	Traditional
MIG Welding	15	1 Credit	UAF	Dillingham	Traditional
Onboard Drill Conductor	8	Noncredit	UAF	Dillingham	Traditional
Small Engine Repair	15	1 Credit	UAF	Dillingham	Traditional
Understanding Ocean Changes: The Effect of Ocean Changes on Local Resources	20	1 Credit	UAF	Dillingham	Traditional

Alaska Sea Grant, www.seagrants.uaf.edu

Maritime Related Training, FY15					
Program	Hours	Credit/Noncredit/CEUs	University	Location	Delivery
Alaska Shellfish Farming Technology	24	Noncredit	UAF	Anchorage	Traditional
Ammonia Refrigeration	40	Noncredit	UAF	Kodiak	Traditional
AMSEA Drill Conductor	12	Noncredit	UAF	Cordova	Traditional
AMSEA Marine CPR/First Aid	12	Noncredit	UAF	Cordova	Traditional
Boat Electrical		Noncredit	UAF	Sitka	Hybrid
Business of Fish (Direct Marketing, Fish Biz Resources, Vessel Pre-season Maintenance)	8	1 CEU	UAF	Dillingham	Traditional
Cold Water Safety - Emergency Communications	8	Noncredit	UAF	Cordova	Traditional
Fishing Vessel Drill Conductor Training	12	Noncredit	UAF	Kodiak	Traditional

Alaska Sea Grant (cont.)					
Program	Hours	Credit/Noncredit/CEUs	University	Location	Delivery
Gillnet Net Mending	8	4 CEUs	UAF	Cordova	Traditional
HACCP	16	Noncredit	UAF	Sitka	Traditional
Intro to Shellfish Aquaculture - Module 1	24	Noncredit	UAF	Ketchikan	Traditional
Intro to Shellfish Aquaculture - Module 2	24	Noncredit	UAF	Ketchikan	Traditional
Introduction to Outboard Maintenance and Repair	19	Noncredit	UAF	Dillingham	Traditional
Microbiology (Seafood Processing)	8	Noncredit	UAF	Unalaska	Traditional
Outboard Motor Maintenance	8	Noncredit	UAF	Dillingham	Traditional
Seafood Environmental Compliance	8	Noncredit	UAF	Kodiak	Traditional
Seafood Processing Quality Control Training	80	Noncredit	UAF	Kodiak	Traditional
Shellfish Farming Workshop	24	Noncredit	UAF	Homer	Traditional
Smoking Alaska Seafood for Fun and Profit	24	Noncredit	UAF	Kodiak	Traditional
Alaska Shellfish Farming Technology	24	Noncredit	UAF	Anchorage	Traditional
Ammonia Refrigeration	40	Noncredit	UAF	Kodiak	Traditional
AMSEA Drill Conductor	12	Noncredit	UAF	Cordova	Traditional
AMSEA Marine CPR/First Aid	12	Noncredit	UAF	Cordova	Traditional
Boat Electrical		Noncredit	UAF	Sitka	Traditional
Business of Fish (Direct Marketing, Fish Biz Resources, Vessel Pre-season Maintenance)	8	Noncredit	UAF	Dillingham	Traditional
Cold Water Safety - Emergency Communications	8	Noncredit	UAF	Cordova	Traditional
Fishing Vessel Drill Conductor Training	12	Noncredit	UAF	Kodiak	Traditional
Gillnet Net Mending	8	Noncredit	UAF	Cordova	Traditional
HACCP	16	Noncredit	UAF	Sitka	Traditional
Intro to Shellfish Aquaculture - Module 1	24	Noncredit	UAF	Ketchikan	Traditional
Intro to Shellfish Aquaculture - Module 2	24	Noncredit	UAF	Ketchikan	Traditional
Introduction to Outboard Maintenance and Repair	19	Noncredit	UAF	Dillingham	Traditional
Microbiology (Seafood Processing)	8	Noncredit	UAF	Unalaska	Traditional
Outboard Motor Maintenance	8	Noncredit	UAF	Dillingham	Traditional
Seafood Environmental Compliance	8	Noncredit	UAF	Kodiak	Traditional
Seafood Processing Quality Control Training	80	Noncredit	UAF	Kodiak	Traditional
Shellfish Farming Workshop	24	Noncredit	UAF	Homer	Traditional
Smoking Alaska Seafood for Fun and Profit	24	Noncredit	UAF	Kodiak	Traditional



Ketchikan Campus, www.uas.alaska.edu/ketchikan/index.html

Maritime Related Training, FY15					
Program	Hours	Credit/Noncredit/CEUs	University	Location	Delivery
CEU 041 Wrangell Narrows/Peril Straits Seminar	8	0.3 CEU	UAS	Ketchikan	Traditional
DESL 106 Diesel Engines Simplified	44	6 Credits	UAS	Ketchikan	Traditional
DESL 110 Diesel Engines	120	6 Credits	UAS	Ketchikan	Traditional
DESL 125 Basic Hydraulics	45	3 Credits	UAS	Ketchikan	Traditional
DESL 130 Refrigeration & AC	39	2 Credits	UAS	Ketchikan	Traditional
DESL 193 Marine Electrical Systems	51	3 Credits	UAS	Ketchikan	Traditional
MTR 119 Skiff Operator	24	1 Credit	UAS	Juneau	Traditional
MTR 129 Basic Safety Training	40	2 Credits	UAS	Ketchikan	Traditional
MTR 220 Proficiency in Survival Craft	32	2 Credits	UAS	Ketchikan	Traditional
MTR 225 Able Seaman	40	2 Credits	UAS	Juneau Ketchikan	Hybrid
MTR 226 Ratings/Navy Watch	24	1 Credit	UAS	Ketchikan	Traditional
MTR 228 Fast Rescue Boat	36	2 Credits	UAS	Ketchikan	Traditional
MTR 239 Master 100 Ton & Operator of Uninspected Passenger Vessel	88	5 Credits	UAS	Juneau Ketchikan Wrangell	Traditional
MTR 240 Master 200 Ton Upgrade	24	2 Credits	UAS	Ketchikan	Hybrid
MTR 242 Advanced Fire Fighting	32	2 Credits	UAS	Ketchikan	Traditional
MTR 244 Crisis Management	14	1 Credit	UAS	Ketchikan	Traditional
MTR 250 Radar Observer	40	2 Credits	UAS	Ketchikan	Traditional
MTR 254 Electronic Chart Display	36	2 Credits	UAS	Ketchikan	Traditional
VTEC 005 First Aid/CPR Mariner	8	Noncredit	UAS	Juneau Ketchikan	Traditional
VTEC 031 Basic Safety Training Refresh	24	Noncredit	UAS	Ketchikan	Traditional
VTEC 032 Crowd Management	4	Noncredit	UAS	Ketchikan Seward	Traditional
VTEC 032 Knot Seminar	4	Noncredit	UAS	Ketchikan	Traditional
VTEC 032 Marine Safety Instructor Training	50	Noncredit	UAS	Ketchikan	Traditional
VTEC 035 Radar 1-3 Day Renewal	8	Noncredit	UAS	Ketchikan	Traditional
VTEC 039 Online Radar Refresher	4	Noncredit	UAS	Ketchikan	Traditional
VTEC 040 Basic Hydraulics	16	Noncredit	UAS	Ketchikan	Traditional
VTEC 041 Applied Math for Trades	16	Noncredit	UAS	Ketchikan	Traditional
WELD 120 Basic Welding	62.5	3 Credits	UAS	Ketchikan	Traditional
WELD 175 Intro to Pipe Fitting	62.5	3 Credits	UAS	Ketchikan	Traditional
WELD 175 Advanced Welding	62.5	3 Credits	UAS	Ketchikan	Traditional

Sitka Campus, www.uas.alaska.edu/sitka/index.html

Maritime Related Training, FY15					
Program	Hours	Credit/Noncredit/CEUs	University	Location	Delivery
Alaska Salmon Culture Lab	15	1 Credit	UAS	Sitka	Traditional
Boat Electrical	10	1 CEU	UAS	Sitka	Traditional
CTPM Customer Service	15	1.5 CEUs	UAS	Sitka	Traditional
CTPM Facility Safety	15	1.5 CEUs	UAS	Sitka	Traditional
CTPM Fire Safety	15	1.5 CEUs	UAS	Sitka	Traditional
CTPM Harbor Administration	15	1.5 CEUs	UAS	Sitka	Traditional
CTPM Haz Materials and Waste	15	1.5 CEUs	UAS	Sitka	Traditional
CTPM Marine Structures	15	1.5 CEUs	UAS	Sitka	Traditional
CTPM Oil Spills	15	1.5 CEUs	UAS	Sitka	Traditional
CTPM Operations Planning	15	1.5 CEUs	UAS	Sitka	Traditional
CTPM Utilities: Electrical	15	1.5 CEUs	UAS	Sitka	Traditional
CTPM Utilities: Water	15	1.5 CEUs	UAS	Sitka	Traditional
Fisheries Mgmt Techniques Lab	15	1 Credit	UAS	Sitka	Traditional
Intro to Alaska Aquaculture	15	1 Credit	UAS	Sitka	Traditional
Marine Hydraulics	6	0.6 CEU	UAS	Sitka	Traditional
Scientific Diving	30	2 Credits	UAS	Sitka	Traditional
Welding Certification Lab	Varies	Varies	UAS	Sitka	Traditional