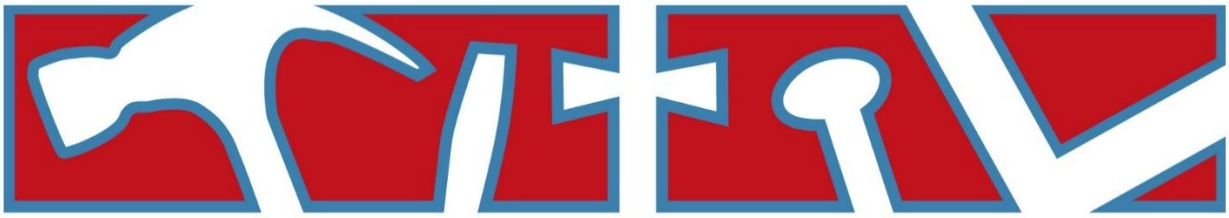
Amundsen Educational Center



Amundsen Educational Center (AEC)

Vocational Education Catalog

2026/2027

AMUNDSEN EDUCATIONAL CENTER

Vocational Education Catalog

Amundsen Educational Center (AEC) is a faith-based, non-profit organization that provides vocational training in a Christian community for the people of rural Alaska. Since 2001, our primary vocational program has been Residential Construction, though we do have course offerings in other areas. AEC is authorized by the Alaska Commission on Postsecondary Education, and is incorporated by the State of Alaska. AEC does not discriminate because of race, ethnic origin, color, national origin, sex, age, political affiliation, religious beliefs or ability.

Amundsen Educational Center
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(907) 260-8041
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I certify this publication to be true and correct in content and policy at the time of publication.

Mike Swanson, Executive Director

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INTRODUCTION

Amundsen Educational Center is here to help you develop vocational skills. You will experience AEC as a small community where people – students, instructors and staff – make friends and work together to develop skills, gain knowledge, and form the attitudes and values, which will sustain you throughout your life.

AEC offers employability skills training to empower students for their career track. We accept students at their own levels and give them guidance and direction through instruction and work experience.

When you leave AEC, it is our goal that you will not only have the vocational skills needed to enter your chosen career, but that you will gain confidence in yourself and respect for others. Thank you for letting us be a part of your journey. It is never too late to start owning your success!

HISTORY

When the students and staff of Covenant High School, which operated in Unalakleet, Alaska from 1954-1985, had a reunion in 1995, several alumni voiced a need for an educational institution that would help Alaskan youth make the transition from high school to postsecondary education. They took their concern to Rev. Maynard Londborg who had founded Covenant High. Knowing of Rev. H. Roald Amundsen's interest in vocational education, Londborg brought the need identified by the Covenant High alumni to his attention. Their discussions led to setting up a committee to bring Amundsen Educational Center into being.

Amundsen - a pastor, missionary, teacher, bush pilot, founder, and for many years director of the Missionary Aviation Repair Center, envisioned a Christian vocational school providing training in both vocations and Christian living that would serve the youth of the more remote regions of Alaska.

The steering committee applied to the State of Alaska and obtained incorporation for Amundsen Educational Center (AEC). The by-laws, dated April 24, 1996, state that the purpose of the corporation is "to operate an educational center which, in a Christian setting, may include vocational, biblical, college, and college preparatory studies."

The Internal Revenue Service granted AEC tax-deductible status as a non-profit school, and AEC received donations of land totaling 48 acres for its campus in Soldotna, Alaska.

In the summer of 2001, the Alaska Commission on Postsecondary Education recognized AEC's certificate in Christian youth work and in January 2002 authorized a certificate in Residential Construction. In December 2003 the ACPE authorized an Advanced Certificate in Residential Construction. Amundsen Educational Center enrolled its first students in September 2001. In May 2002, AEC granted its first certificates in Residential Construction and in May 2007 they celebrated the first graduates in the Advanced Certificate program.

Alumni of our programs have gone on to become general contractors, work in construction trades or continue with further training. Some have returned home to pursue other career paths, with skills in construction that have served their families and communities well.

FACILITIES

The campus of Amundsen Educational Center is located at 995 Road Avenue in Soldotna, Alaska. The facilities are situated on 48 acres, conveniently located within the city limits, yet in a quiet, private location near the world famous Kenai River.

As you approach the campus, you will first see our beautiful 4800 square foot Woldstad Training Center. Built in 2012, largely by volunteer labor provided by Samaritan's Purse, the Training Center houses classrooms and a commons area with a full kitchen. Also located in the Training Center are AEC's administrative offices.

Continuing along Roald Avenue, you will find our shop and student housing. The campus has four buildings, named for our founding fathers. The Oyoumick Building houses the student lounge, a construction and maintenance shop and laundry facilities. The Bruckner and Fortuine Buildings provide staff housing. The Londborg cabin provides student housing. The campus also offers a wood steam, called a maqii by our students from Western Alaska.

ADMISSION

Policy

All programs at AEC admit students of any race, color, gender or ethnic heritage.

Building Hope Construction

The Building Hope Construction (BHC) department of Amundsen Educational Center offers two diploma programs: Residential Construction and Advanced Residential Construction.

Applicants for admission to Building Hope Construction (BHC) must have a high school diploma, a GED, or be willing and eligible to work toward a GED certificate. Students must earn a GED or high school diploma before they can become candidates for an AEC diploma. AEC partners with Kenai Peninsula College, who offers preparatory training and provides instruction to assist students in studying for the GED examination.

Applicants must also present evidence that they can benefit from the instruction provided by AEC. Such evidence will include a transcript from their last high school attended, colleges previously attended and two recommendations. One recommendation can come from a family member or personal friend. The other recommendation should be from someone outside the applicant's immediate family such as a former teacher, an employer, a church leader or another adult who knows the applicant's abilities and interest in attending Building Hope Construction. Recommendation forms, which may be duplicated as needed, will be sent to those seeking admission when their application form is received. Admissions priority will be given to those applicants who already possess a high school diploma or those with their GED. Likewise, admission priority will be given to applicants who have demonstrated an effort to secure financial aid and/or resources to meet their Building Hope Construction financial obligations.

High school seniors are encouraged to apply for admission in January of their last year in high school. Seniors who apply before they graduate will be admitted conditionally with the understanding that their admission will become final when BHC receives an official transcript that denotes graduation from high school.

Aviation Technology

In cooperation with Missionary Aviation Repair Center (MARC), AEC offers training towards certification in Private Pilot Ground School + Flight Training and Instrument Ground School + Flight Training.

Applicants must be 17+ years old, be able to read, speak, write and understand English.

Applicants must live 100% drug and alcohol-free and be able to pass a Federal Aviation Administration (FAA) Medical Exam.

BUILDING HOPE CONSTRUCTION

Student Progress and Academic Performance

Students are expected to make steady progress toward completion of their programs. Full-time attendance will normally allow a student to finish a diploma in nine months. However, if students have gaps in their preparation or need to complete GED's, they should plan on taking longer than nine months to earn a diploma. If a student wishes to complete the program in an accelerated period of time, he or she must obtain permission from their advisor and a signed addendum to the enrollment contract must be completed to reflect the alternative attendance requirement and program start/end dates.

To remain in good academic standing, a student must complete all required coursework and maintain an 80% average. If at any time a student's grad falls below 80%, the student will be placed on probation for a period of 6 weeks. When a student is placed on probation, his or her advisor will meet with him or her specifically to make recommendations to assist the student to improve his/her learning. Options include tutoring, study hours, and training in study methods.

If academic performance continues to be unsatisfactory after the probationary period, a faculty committee will consider the case. The committee may recommend administrative withdrawal or extend the probationary period for an additional 6 weeks. After that, withdrawal is automatic if the student has not regained good standing. The student may apply for readmission into the next fall/spring class scheduled.

Students are strongly encouraged to devote themselves to their coursework at AEC for the duration of their program and only work off campus if necessary.

Graduation Requirements

A student must complete the required curriculum described in the catalog and enrollment contract with a minimum of 80% proficiency in each course.

Grading System

Amundsen Educational Center uses the following percentage grading system:

Percentage	*Proficiency Level*
90-100%	Excellent, indicates high level of performance
85-89%	Above average level of achievement
80-84%	Satisfactory level of achievement
Below 80%	Insufficient grasp of materials. Students earning this grade are subject to remedial work
P	Indicates passing work
F	Indicates failure
W	Indicates withdrawal from course
I	Incomplete grade given when course work is not completed at time of grading. Incomplete grades not removed within one month, while classes are in session, will be converted to an F

AVIATION TECHNOLOGY

Student Progress and Academic Performance

As flight instruction and flight training are both governed by the Federal Aviation Administration (FAA), completing the required hours does not automatically result in licensure. To achieve the license attached to each Aviation Technology program of study, students must pass the written exam and practical flight exam.

There's no limit to the number of times students can retake a FAA written exam. However, students must wait at least 14 days before retaking it after a failure.

- **Passing Score:** A score of 70% or higher to pass the exam.
- **Instructor Endorsement:** Students will need an instructor's endorsement before retaking the test, indicating they have reviewed the areas where there were missed questions.

Student Records

Student records are maintained by the Director of Operations, located in the Woldstad Training Center and securely online. Records are available upon request.

STUDENT INFORMATION

Attendance Policies

Students may be excused from classes for valid reasons such as illness or family responsibilities. Prior to the absence, the student must make arrangements with his or her instructor(s) to make up work.

If an unanticipated absence occurs because of problems such as illnesses, accidents, weather or other transportation problems, and if the absence extends for more than one day, the student must make every effort to contact his or her instructors to explain the situation and get make-up assignments. It is up to the instructor to determine if an absence is to be classified as excused or unexcused.

Any student who is ill or injured for more than 2 consecutive days, must visit a doctor or medical clinic before returning to class.

In cases of inclement weather, school closures or delays will depend on the ability of staff to safely travel to and from campus.

Building Hope Construction:
For construction coursework, it is essential that students be present for every class and each day of work. As students are at AEC to prepare for a career in construction, committed, daily presence is just as important as it would be for a paying job. Therefore,

attendance will be treated with the same weight as it is on a work site.

One unexcused absence is permitted in construction coursework each semester. A second unexcused absence will result in immediate probation for the remainder of the half-year. While on probation, the student must meet regularly with either the student life coordinator or a school approved counselor. Additionally, while on probation, a student may have off-campus privileges restricted.

The third unexcused absence is grounds for administrative withdrawal. This is to emphasize what is expected in the construction field in most places–if you do not come to work, you will get fired.

Students arriving to class more than 15 minutes late will be considered tardy. Being tardy twice is the equivalent to one unexcused absence.

Aviation Technology:
Missionary Aviation Repair Center (MARC) records Ground School and Instrument Ground School classes for students who need to make up missed attendance. Minimum flight and training hours must be met to complete the training and to take FAA written and flight tests.

Leave of Absence

You are required to let the school know within 24 hours (one working day) if you are ill or have an emergency or other authorized absence. A Leave of Absence (LOA) will be granted for death of immediate family members, extended illness verified by a written statement from a doctor, and unexpected circumstances (i.e. automobile accident, school emergency with child, etc.). LOAs will be for a minimum of three (3) days or a maximum of one (1) month. Weekly contact with AEC is required to monitor your status.

Before a student can return to class after a LOA, they must meet with their instructor to review their academic standing. Students may be required to make up any missed work. If it is deemed that the student is unable to return to class due to academic reasons, they will be offered the option to wait until the program is offered again to resume study.

If a student cannot complete their program by the original contracted ending date and has resumed classes immediately after a LOA, they may be allowed to extend their time by the amount of time on their LOA.

If a student does not return or make other arrangements for continued study, they will be administratively withdrawn from the program. AEC staff will review their records to determine if they qualify for tuition reimbursement based on their last date of attendance.

A student will be required to be in good academic standing to be eligible for a LOA.

Make-Up Policies and Procedures

It is AEC policy that to earn full clock hours for any course, the student must demonstrate that she or he has mastered the course content.

If a student is absent for up to two weeks for legitimate purposes, the student may arrange with the

instructors of her or his courses to make up the work missed, including any missed tests and work projects. The instructor and student together will decide whether or not the student should withdraw from the course or attempt to make up the work.

If a student leaves after satisfactorily completing more than half of the course and does not receive a tuition refund, she or he may simply "audit for clock hours" the course the next time it is offered and receive full clock hours by passing the rest of the course work and exams. To "audit for clock hours" requires the instructor's permission and that there is room in the class. When a student is allowed to audit for clock hours, he or she does not pay tuition for retaking the course.

Transfer of Credits

Although some course descriptions in this catalog are similar to those offered by other institutions of postsecondary education, it should not be assumed that coursework will transfer to other institutions.

As the Alaska Commission on Postsecondary Education points out, "…transfer of credit is always at the discretion of the receiving school and depends upon the comparability of the curricula and accreditation (20 AAC 17.075 (20))." For purposes of BHC articulation, AEC considers 30 training hours equivalent to a semester hour.

Withdrawal

If a student finds it necessary to leave AEC during the semester, she or he should go to the Program Director for a withdrawal form. An exit interview is required to officially withdraw. The student may ask an instructor to conduct the interview or may be interviewed by one of the administration staff. It is important that this process be completed. If an official withdrawal is made, the student will receive W's for courses in which she or he is enrolled. If no official withdrawal is filed, failing grades will be assigned. The grade of W does not affect the student's academic standing and the student can return to AEC whenever her or his circumstances permit.

Also, depending on how long the student has been active in the semester, it is possible that she or he may have a refund coming. If the student has completed enough of the course work, the instructor may be able to give the student a grade and partial clock hours.

Grievance Procedure

Students may file a grievance by submitting a written complaint to the Executive Director:

Mike Swanson
Amundsen Educational Center
995 Roald Avenue
Soldotna, AK 99669
mike@aecak.org

If no resolution is reached, the student may direct their grievance to the AEC Board of Directors.

Finally, if no resolution is reached, the student may contact the Alaska Commission on Post-Secondary Education. AEC will accept the ruling of the commission.

Advising

Academic advising for students is provided by the directors at AEC. These individuals will assist the student in choosing a vocational program; help arrange an appropriate schedule of classes, study, and work. The academic advisor is the first person to whom a student should go with any academic problems.

Students are guaranteed the right of access to their files. With a student's written approval, referrals will be made and records provided to appropriate agencies for specialized counseling; e.g., drug, alcohol, family.

Career Planning

Academic advisors will also help students plan for their careers. This may include: one-on-one discussion, administration of a career interest inventory or referral to other community resources. If the student's aptitude and interests are not met by AEC curricula, the staff will recommend other appropriate training or education.

Placement

As students near the end of their certificate programs, they should ask the instructor of their vocational program for help in finding a job. The instructor's experience and contacts with employers in the field will make job hunting easier. However, placement is a shared responsibility within the whole AEC community. It is AEC's goal that each graduate will be employed within six months of graduation.

Due to our history and reputation within the community, we receive calls from employers searching for employees. We will match skills with requests and refer students for an interview as appropriate.

Counseling

All of our staff at AEC are dedicated to the success and overall well-being of our students. We recognize that some students may need professional help or counseling beyond what our staff is qualified to provide. We have established a working relationship with a local Christian counseling center that is willing to provide quality counseling to our students and will also take students to the local Native clinic for mental health appointments.

STUDENT CONDUCT

Student Conduct Policy

Tobacco, Drugs and Alcohol

Because of the high potential of alcohol to be destructive to health and relationships, no alcohol is allowed on campus. The use of marijuana products, illegal drugs or the misuse of drugs and other substances is also harmful to individuals and to community and, therefore, prohibited.

The consumption of tobacco has been proven to be harmful to a person's health. Therefore, their use is discouraged and is not permitted in AEC buildings.

As with any workplace, random drug tests may be administered at any time. No student is allowed to have in their possession any illegal substance, marijuana product, alcoholic beverage, or controlled substance (as defined by the U.S. Gov't). This ban is enforced on campus, the job site, and in school vehicles. Should an individual be caught, either in possession or under the influence, they will meet with an AEC director immediately to discuss whether or not the student should continue in the program.

A person who violates the smoking, drug or alcohol policy, breaks the law, or harasses another student or staff member is subject to corrective and/or disciplinary action.

For students residing on campus, this disciplinary action will include, but is not limited to, steps outlined in the Restoration Policy. For students in stand-along courses living off-campus, disciplinary action will be determined on a case-by-case basis and may include, but is not limited to, contact with local authorities, limited access to campus, or disciplinary probation.

Restoration Policy

After a violation of student conduct policy that does not result in immediate program withdrawal, the individual will be placed on conduct probation, with probationary terms and timeframe to return to good standing.

An individual who violates the terms of conduct probation will be removed from their program and provided terms and timeframe for potential readmission.

An individual who is readmitted after involuntary program withdrawal will return on conduct probation with terms and a timeframe to return to good standing.

Cell Phone Use

There is to be no cell phone use during class hours. Emergency calls may be directed to the office at (907) 260-8041.

Student Housing

Building Hope Construction students are expected to live on campus while enrolled in BHC diploma programs or if they are enrolled in Aviation Technology programs through AEC. Student life activities are designed to help enhance your educational experience and encourage your spiritual growth while living on the AEC campus. The Student Life Handbook will provide more details regarding campus living, activities and student expectations.

Cabs, Ride Share & DoorDash

We have an open campus and students are allowed to come and go as they please outside of classes and within curfew hours. However, students that owe money to AEC are not allowed to have cabs or ride share services like Uber or Lyft come to campus or have DoorDash or other food delivery services bring food to campus. To be blunt, if you can afford a cab or have food delivered, you can afford to contribute to your education and training.

Visitors to Campus

Visitors to campus should check-in at the Woldstad Training Center – 995 Roald Avenue. This includes guests of students, cabs, ride share and food delivery. Visitors are not to drive past the cul-de-sac or be in any of the 998 Roald Avenue buildings without staff approval. Visitors to campus, including students enrolled in stand-alone courses (QuickBooks, Ground School *without flight training*) agree to abide by campus rules while visiting campus.

Vehicles on Campus

All vehicles entering 995 or 998 Roald Avenue must be licensed, registered, insured and in proper working order. Staff permission must be secured to work on vehicles on campus, regardless of whether AEC tools and facilities are being used.

FINANCIAL INFORMATION

AEC is authorized by the State of Alaska and is eligible for the Alaska Supplemental Education Loan and the Alaska Family Education Loan.

Grants and scholarships are available for students who qualify (e.g., tribal, regional and village corporation, vocational, etc.). Students will be referred to the proper funding agencies to determine eligibility. Upon funding source approval and enrollment in school, students will be required to follow their funding source and AEC regulations.

All diploma and certificate programs are eligible for the Alaska Performance Scholarship.

Students, on an individual basis, can develop private payment plans for tuition, room/board and fees with AEC Administrators. Diplomas and release of student records may be withheld for non-payment.

Note: AEC strongly discourages students or their families from borrowing money to attend AEC.

Alaska Supplemental Education Loan Disbursement

Upon receipt of the first Alaska Supplemental Education Loan disbursement, AEC will retain all of the nonrefundable books and supplies fees, with the remaining funds applied toward tuition. Upon receipt of the second Alaska Supplemental Education Loan disbursement, AEC will retain the balance due on tuition. The remaining funds will be disbursed to the student upon meeting ASELP disbursement requirements. If a student is on probation, AEC will contact Alaska Commission on Postsecondary Education for a ruling before disbursing monies. Monies will be disbursed only to students making satisfactory academic progress.

Tuition Refund Policy

If a student withdraws from AEC, tuition will be refunded according to the following schedule:

- For a period of time after instruction has begun but before the second day of classes or the equivalent, the institution shall refund 100 percent of the tuition; after

that,

- For a period of time after the first day of class but not more than 10 percent of the classes has elapsed, the institution shall refund at least 90 percent of the tuition; after that,
- For a period of time after which greater than 10 percent but not more than 20 percent of the classes has elapsed, the institution shall refund at least 80 percent of the tuition; after that,
- For a period of time after which greater than 20 percent but not more than 25 percent of the classes has elapsed, the institution shall refund at least 55 percent of the tuition; after that,
- For a period of time after which greater than 25 percent but not more than 50 percent of the classes has elapsed, the institution shall refund at least 30 percent of the tuition; after that,
- The institution may require the student to remain committed to the entire amount of the tuition.

Any applicant not accepted by the school shall receive a refund of all tuition and fees paid. The school shall acknowledge a student's cancellation or withdrawal, in writing, within five (5) business days of notification. All refunds to a student must be made within 45 days after receipt of notification of the student's withdrawal, or 30 days after the student's last recorded date of physical attendance, whichever is earlier.

Books, if not used, may be returned for full price during the first two weeks of class. After that, if the book will be used by AEC in the future, it will be bought back at half the new price. The book must be in reasonable condition (underlining and highlighting may be acceptable).

Unless otherwise specified by a funding agency, any refunds will be returned to the funding agency from which they were received. For each student, an itemized account of charges and funding sources is available.

RESIDENTIAL AND TRANING COSTS OF PROGRAMS

Building Hope Construction (BHC)
Residential Construction &
Advanced Residential Construction

Tuition	$7800
Lab Fees	$2000*
Books	$ 100*
Supplies	$1000*
Housing	$6000
Food	$4000
Student Activity Fee	$1000*
Transportation	$1000
BHC TOTAL COST	$22,900.00

Building Hope Construction
Residential Construction Internship

Tuition $10/training hour

Housing costs for Internships will vary depending on internship location. Internships may be paid, offsetting the training cost in part or in full.

Aviation Technology (AT)
Private Pilot Ground School + Flight Training & Instrument Ground School + Flight Training****

Tuition	$ 700
Lab Fees (Flight Training)	$15000
Books	$ 100*
Supplies	$ 500*
Housing	$3000
Food	$2000
Student Activity Fee	$ 500*
Transportation	$ 500
AT TOTAL COST.....	$22,300.00

AEC
QuickBooks

Total Cost $600

**nonrefundable*

Explanation of fees:

1. *Housing is calculated at $510 per month.*
2. *Food is calculated at $10 per day multiplied by the total program days. Students will be responsible for preparing their own meals in rotation with students and staff, with the exception of occasional community meals or prepared meals provided elsewhere.*
3. *Students are expected to provide their own transportation to and from AEC from home. AEC provides transportation to and from Anchorage as needed at the start and end of the school year and Christmas break.*
4. *The vast majority of students receive financial aid, which greatly reduces the cost of attending AEC.*

*** Flight Training includes up to 60 hours of flight training / flight time. AEC will help students who need more training to secure funding and purchase more air time if needed.*

VOCATIONAL PROGRAMS

BUILDING HOPE CONSTRUCTION

DIPLOMA IN RESIDENTIAL CONSTRUCTION

9 month program (minimum 1100 training hours)

Residential Construction Major Requirements		
#	Course Title	Minimum Hours
RC 100	NCCER Core Curriculum	75
RC 101	Building Sites and Foundations	40
RC 102	Framing	160
RC 103	Insulation / Vapor Barrier	30
RC 104	Interior Finishes	160
RC 105	Exterior Finishes	80
RC 106	Finish Carpentry	40
AM 101	Math for the Trades	40
LS 101	Skills for Life and Career Success	30
LS 102	Skills for Independent and Community Living	80
ABA 101	Intro to Personal Finance	30

Residential Construction Electives* **These courses may be used to count toward the minimum 1100 training hours.*		
#	Course Title	Minimum Hours**
RC 190	Independent Projects in Construction	20
FIX 101	Intro to Facility & Residential Maintenance	20
FIX 102	Interior Repairs	20
FIX 103	Exterior Repairs	20
FIX 104	Basic Electrical Maintenance & Repairs	20
FIX 105	Basic Plumbing Maintenance & Repairs	20
LOG 101	Chainsaw Operations	20
LOG 102	Sawmill Operations	20
LOG 103	Lumber Curing & Processing	20

** Electives are not required for the Diploma in Residential Construction, but when they are being used, they must have a minimum of 20 hours in each elective area.

The Residential Construction diploma program is designed for those who wish to explore opportunities in the building trades. It prepares them to work safely and with basic understanding as general laborers in construction fields or as helpers to plumbers, electricians, and carpenters. The career ladder for people entering at this level often leads to union apprenticeship programs, building maintenance, or to further post-secondary education.

Sample Job Expectations: Construction Worker, Carpenter, Entry Level positions in specialty construction such as framing, siding, drywall, painting, flooring, and finish carpentry.

Real world construction projects provide the learning lab for the delivery of most of the residential construction instruction. BHC students spend one day a week in class and four days a week on the job site. Sometimes the job site is a single-family home or garage addition and sometimes it is building a new deck for local elders, or even a short-term service building project in a village off the road system. Because each project is different, each core curriculum area is given a minimum number of training hours. Some projects will have more land to be cleared, others will have more intricate framing. The range reflects the variability of projects.

DIPLOMA IN ADVANCED RESIDENTIAL CONSTRUCTION

9 month program (minimum 1100 training hours)

Advanced Residential Construction Major Requirements		
#	Course Title	Minimum Hours
RC 201	Advanced Construction Techniques I	150
RC 202	Advanced Construction Techniques II	150
RC 203	Construction Practicum I	300
RC 204	Construction Practicum II	300

Residential Construction Electives* **These courses may be used to count toward the minimum 1100 training hours.*		
#	Course Title	Minimum Hours**
RC 190	Independent Projects in Construction	20
FIX 101	Intro to Facility & Residential Maintenance	20
FIX 102	Interior Repairs	20
FIX 103	Exterior Repairs	20
FIX 104	Basic Electrical Maintenance & Repairs	20
FIX 105	Basic Plumbing Maintenance & Repairs	20
LOG 101	Chainsaw Operations	20
LOG 102	Sawmill Operations	20
LOG 103	Lumber Curing & Processing	20

** Electives are not required for the Diploma in Residential Construction, but when they are being used, they must have a minimum of 20 hours in each elective area.

The Advanced Residential Construction diploma program is offered for those who have completed the Residential Construction Diploma, have demonstrated aptitude for the construction profession, a desire to have a second year of experience and skill building, and a willingness to lead and mentor new students. The Advanced Diploma enhances the graduate's opportunities to find employment in construction since employers are often looking for people with more experience. In addition, students further develop their skills and gain wider experience in building, students in the advanced diploma program acquire their first experience in being leaders on work crews.

Sample Job Expectations: Construction Worker, Carpenter, Employment in specialty construction such as framing, siding, drywall, painting, flooring, and finish carpentry.

CONSTRUCTION INTERNSHIP

Varies

Construction Internship		
#	Course Title	Minimum Hours
RC 301	Internship	120

The Construction Internship is offered to select students who have completed the Advanced Residential Construction Diploma. The internship can take the form of employment as a Construction Assistant, working with an AEC Construction Instructor to help mentor and supervise residential and advanced residential construction students. The internship can also involve placement with an AEC approved contractor to continue to develop their construction skills. In addition to supervisory skills, interns are typically exposed to the contractor end of building projects – estimating costs, ordering and transporting materials, and working with subcontractors.

Sample Job Expectations: Foreman/Foreperson, Future Contractor (which requires additional experience, education and credentialing.)

AVIATION TECHNOLOGY

CERTIFICATE PRIVATE PILOT GROUND SCHOOL

11 week (minimum 57.5 training hours)

Residential Construction Major Requirements		
#	Course Title	Minimum Hours
AT 101	Private Pilot Ground School	27.5
AT 102	Flight Training	30

CERTIFICATE INSTRUMENT GROUND SCHOOL

11 week (minimum 77.5 training hours)

Residential Construction Major Requirements		
#	Course Title	Minimum Hours
AT 103	Instrument Ground School	27.5
AT 104	Instrument Flying	50

Note:Student must hold an FAA Private Pilot Certificate (PPL)and current FAA medical certificate* to enroll in Instrument Ground School. *AEC can help students secure their FAA Medical Certificate including applying, scheduling and payment as needed.

Amundsen Educational Center

Course Catalog
2025-2027

Course Descriptions by Subject

Applied Business Administration

ABA 101 – Intro to Personal Finance

Introduction to household finance and financial literacy. Surveys topics such as family budgeting, income tax fundamentals, consumer credit, home buying and financing, auto financing, insurance, investment fundamentals, estate planning, and retirement planning.

ABA 120 – QuickBooks for Bookkeepers

Introduces the QuickBooks accounting program. Covers basic bookkeeping procedures for company setup and maintenance, data input for check register, accounts receivable, accounts payable, banking, and sales tax. Includes basic principles of Financial Accounting and best practices and concepts in bookkeeping.

(QuickBooks is packaged as a 30-hour course in a current version of QuickBooks Pro. A certificate is awarded for completion of the course. AEC usually offers QuickBooks once per semester, meeting twice a week for 2.5 hours over 6 weeks.)

Applied Math

AM 101 – Math for the Trades

Practical application of mathematics for industry and preparation for technical education, including arithmetic review, ratios and proportion, powers and roots, algebra, geometry and trigonometry. Mathematical applications of basic physics with reference to units of measurement, use of precision measuring tools, measurement of forces, temperature, fluids and electricity.

Aviation Technology

AT 101 – Private Pilot Ground School

Prepares students for Federal Aviation Administration (FAA) Private Pilot Airplane Knowledge Test. Includes basic aerodynamics, aircraft systems, engine operation, flight instruments, radio communication, navigation, weather information and weather dissemination services. Covers Federal Aviation Regulations (FARs) and the Aeronautical Information Manual (AIM).

AT 102 – Flight Training

Prerequisite: FAA Student Pilot Certificate, FAA Class II Medical Certificate*, Age 17+

Provides beginning flight instruction for students intending to become pilots.

AT 103 – Instrument Ground School

Provides preparation for the Federal Aviation Administration (FAA) Instrument Pilot Knowledge Test and flight training under Instrument Flight Rules (IFR). Includes human factors, flight systems, instrument navigation, aeronautical charts and publications, airspace, FAA regulations, and pilot responsibilities.

AT 104 – Instrument Flying

Fulfills Federal Aviation Administration (FAA) flight training requirements for an Instrument Airplane rating under Federal Aviation Regulation (FAR) Part 61.

*AEC can help students secure their FAA Medical Certificate including applying, scheduling and payment as needed.

Biblical and Christian Studies

BCS 101 – Introduction to the Bible

An introductory survey of the history and theology of the biblical narrative as it informs Christian faith today.

Facility & Residential Maintenance

FIX 101 – Introduction to Facility & Residential Maintenance

Introduction to building systems and different types of building maintenance; deferred, preventative, emergency, proactive and reactive. Provides students with basic safety instruction of hand and power tools and chemicals used in the facility maintenance occupation in accordance with Federal OSHA regulations. Instruction in Personal Protective Equipment (PPE) requirements.

FIX 102 – Interior Repairs

Provides students with basic skills needed to repair drywall. Students will learn how to identify components of drywall assembly and identify tools and fasteners needed to install drywall. Students will identify different materials and proper tools needed in drywall re-finishing and matching existing textures and colors.

FIX 103 – Exterior Repairs

This course develops skills in making repairs outside the residence. The students will learn how to repair roofs, gutters and down spouts, exterior walls, screens and windows, doors and door locks, porches, patios, and decks. Also covered are safety awareness, tool selection, and construction materials. But most importantly, the students will learn to make repairs in safe, efficient, and productive manners.

FIX 104 – Basic Electrical Maintenance & Repairs

Electricity for the non-electrician includes hands-on electrical skills and is designed to train maintenance technicians and other non-electrical personnel working in residential and commercial settings. Students learn major electrical components, where and how these electrical components work, and their purposes within electrical systems. Basic electrical troubleshooting and fixes.

FIX 105 – Basic Plumbing Maintenance & Repairs

Learn how common plumbing systems work, the way waters flows in and out of systems and the tools needed for plumbing maintenance. Troubleshooting sinks, tubs, drains, toilets, pipes and how to fix them.

Logging & Milling

LOG 101 – Chainsaw Operations

Chainsaw safety, maintenance and operations. Chainsaw safety including proper PPE (Personal Protective Equipment) for using chainsaws, safe handling and operating practices, understanding kickback, visible and hidden hazards. Chainsaw maintenance including mounting the bar and chain, tensioning the chain, motor maintenance and repair, fuel management, troubleshooting, sharpening, and storing/winterizing. Chainsaw operations including managing area of operations, monitoring weather conditions, tree felling, and timber under tension.

LOG 102 – Sawmill Operations

Sawmill safety, maintenance and operations. Sawmill safety including proper PPE (Personal Protective Equipment) for using band sawmills, safe handling and operating practices. Sawmill maintenance including power head, electrical system, hydraulic system, power head carriage, and frame, changing sawmill blades and proper tensioning, greasing moving parts, sharpening sawmill blades, and general housekeeping/cleanliness duties. Sawmill operations including but not limited to, managing area of operations, determining type of cut and executing milling to obtain desired dimensional lumber, proper treatment and disposal of sawmill operations byproducts.

LOG 103 – Lumber Curing & Processing

Covers treatment and storage of milled lumber, siding and timbers for use in residential construction. Safety including proper PPE (Personal Protective Equipment) for lumber handling and working around kilns and storage systems, proper procedures for working around log decks, proper way to move logs, and general housekeeping/cleanliness duties. Operations including, but not limited to, discussions regarding the various scales used to calculate lumber volume in a log, discussion on full dimension vs nominal sized lumber, discussions on lumber moisture content (species specific and air vs kiln dried), proper methods for air stacking fresh milled lumber, proper loading and operation of drying kiln, straightening and planing lumber to a finished dimension.

Life Skills

LS 101 – Skills for Life and Career Success

A broad collection of skills for students entering post-secondary education. Skills include active listening, effective reading, taking notes, test taking, communication, time management and accessing support resources. Students learn personal development skills addressing issues impacting learning processes, increasing self-esteem, and relating these skills to the community living, classroom, on the job and developing a career. Students meet with a life coach bi-weekly to work on goals and progression toward those goals.

LS 102 – Skills for Independent and Community Living

Developing core competencies required for students to take care of themselves and others. Topics include health and hygiene, kitchen sanitation and cooking, laundry and effective housekeeping. Course may include skills and practicum in subsistence hunting, fishing and gathering.

Residential Construction

RC 100 - NCCER Core: Introductory Craft Skills

This nationally recognized course will introduce students to basic safety, power tools, hand tools, blueprints, rigging, communications skills and employment skills. This course serves as the foundational prerequisite for all entry-level construction and industrial craft apprenticeships.

RC 101 – Building Sites, Plans and Foundations

Introduces students to locating a building on a piece of property, utilizing plot plans, blueprints, and measuring tools. Students will also learn about the various types of foundations used in residential construction and their methods of construction.

RC 102 – Framing

Students will be introduced to the basic components of structure including floor framing, wall framing, roof/ceiling framing, and/or metal framing. Students will learn to identify the different components of a structure and the sequence of constructing each component. Includes instruction and practical experience installing engineered trusses and/or rafters.

RC 103 – Insulation / Vapor Barrier

Introduces students to the various methods of insulation in residential construction, types of insulation, and proper installation techniques. Students will learn the purpose of a vapor barrier, the materials used, and proper installation techniques.

RC 104 – Interior Finishes

Introduces students to various materials used for finishing walls and ceilings, including gypsum board, paneling, and suspended ceilings. Proper installation techniques, methods for finishing, and fastener installation will be reviewed.

RC 105 – Exterior Finishes

Provides an overview of the different types of exterior finishes associated with residential buildings including roofing, siding, and proper flashing techniques to prevent water from entering and damaging the building. Students will learn about the basic components of doors and windows and how to properly install them in the building frame.

RC 106 – Finish Carpentry

Introduces students to the various components of trim carpentry to include: interior door and door hardware, cabinets and countertops, interior trim and moldings, and finish flooring. Students will gain an understanding of the components used in the construction of doors, cabinets, and countertops and the techniques used to successfully install them in a home. The various materials used for finished flooring will be reviewed and students will gain an understanding of selecting the proper flooring for the various rooms in a house.

RC 190 – Independent Projects in Construction

A student may do an independent project by arranging with an instructor to supervise and evaluate the work. The student will prepare a written description and draw up plans for the project for approval by the construction instructor prior to beginning the work.

RC 201 – Advanced Construction Techniques I

Students in the course will learn additional techniques as they are assigned to various construction projects. Guests from various building trades will also discuss with them the opportunities and requirements for employment in their fields. As appropriate, these students will act as crew leads for various phases of the projects overseeing the work of first year students.

Prerequisite: Diploma in Residential Construction

RC 202 – Advanced Construction Techniques II

Students will be introduced to the requirements of typical city and state building codes, as well as the requirements to become a licensed contractor. Students will be involved in the process of getting building permits and gaining inspector's approval of the construction they are engaged with as the building progresses from site preparation through finish work. Students in this course will continue to serve as leads for various building tasks.

Prerequisite: Diploma in Residential Construction

RC 203 – Construction Practicum I

This class is on-the-job training in construction. Students work on a construction site up to 40 hours a week for 18 weeks of training.

Corequisite: Advanced Construction Techniques I

RC 204 – Construction Practicum II

This class is on-the-job training in construction. Students work on a construction site up to 40 hours a week for 18 weeks of training.

Corequisite: Advanced Construction Techniques II

RC 290 – Independent Projects in Construction (Advanced)

A second year student may do an independent project by arranging with an instructor to supervise and evaluate the work. The student will prepare a written description and draw up plans for the project for approval by the construction instructor prior to beginning the work.

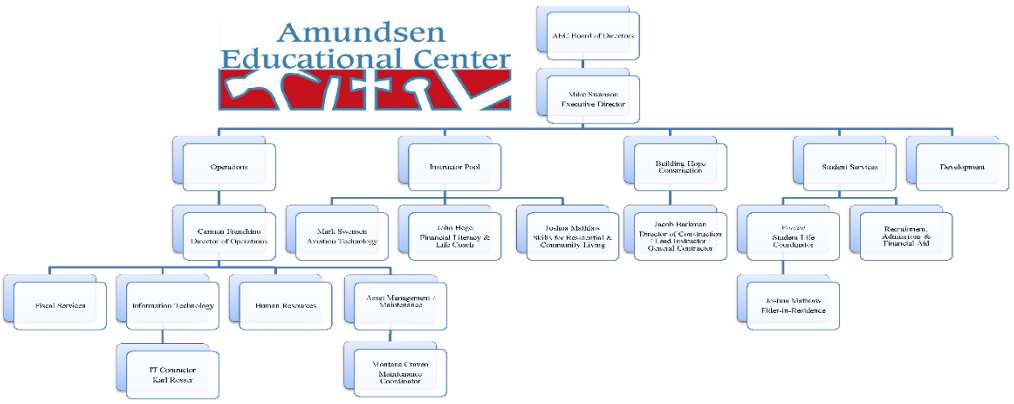
RC 301 – Internship

The Construction Internship is offered to select students who have completed the Advanced Residential Construction Diploma. The internship can take the form of employment as a Construction Assistant, working with an AEC Construction Instructor to help mentor and supervise residential and advanced residential construction students. The internship can also involve placement with an AEC approved contractor to continue to develop their construction skills. In addition to supervisory skills, interns are typically exposed to the contractor end of building projects – estimating costs, ordering and transporting materials, and working with subcontractors.

Internships can also be specific to specialized content areas, e.g. foundations, framing, sheet rock, mudding & taping, painting, etc.)

AMUNDSEN EDUCATIONAL CENTER

Organizational Structure



AEC Organization Chart 04.27.25

AMUNDSEN EDUCATIONAL CENTER

AEC Staff Directory

Mike Swanson – Executive Director
mike@aecak.org

Carmen Franchino – Director of Operations
carmen@aecak.org

Jacob Barkman – Director of Construction
jacob@aecak.org

Jerry Johnson – Construction Instructor
jerry@aecak.org

JD Tuell – Student Life Coordinator
jd@cyak.org

John Hege – Instructor & Life-Coach
john@cyak.org

AEC Board Directory

Mark Swensen - AEC Board Chair, Flight Instructor
mmswensen@alaska.net

Eric Johnson - AEC Board Vice-Chair
ejohnson@alaskacc.edu

Bill Severson - AEC Board Secretary
bill@aecak.org

Tim Amundsen - AEC Board Treasurer
timer@ptialaska.net

Russ Richardson - AEC Board
rjrichardson@samaritan.org

Jerry Vantrease - AEC Board
homervantreases@gmail.com

Dave Petersen - AEC Board
alaskanpetersens@hotmail.com

ACADEMIC CALENDAR

2025/26 AEC Calendar

JULY

S	M	T	W	T	F	S
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

AUGUST

S	M	T	W	T	F	S
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

SEPTEMBER

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
5	6	7	8	9	10	11

OCTOBER

S	M	T	W	T	F	S
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

NOVEMBER

S	M	T	W	T	F	S
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

DECEMBER

S	M	T	W	T	F	S
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

JANUARY

S	M	T	W	T	F	S
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

FEBRUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
1	2	3	4	5	6	7
8	9	10	11	12	13	14

MARCH

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11

APRIL

S	M	T	W	T	F	S
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2
3	4	5	6	7	8	9

MAY

S	M	T	W	T	F	S
26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

JUNE

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
5	6	7	8	9	10	11

3&4-Jul	Independence Day
1-Sep	Labor Day
1-Oct	First Day of Classes
13-Oct	Indigenous People's Day
27&28-Nov	Thanksgiving Break
19-Dec	Last Day of Fall Semester
20-Dec	Christmas Break Begins
4-Jan	Return to Campus
5-Jan	First Day of Spring Classes
19-Jan	MLK, Jr. / Civil Rights Day
16-Feb	Elizabeth Peratrovich Day
3-Apr	Good Friday
21-May	Last Day of Spring Semester
22-May	Graduation
25-May	Memorial Day