Submit originals and one copy and electronic copy to Governance/Faculty Senate Office (email electronic copy to fysenat@uaf.edu)

PROGRAM/DEGREE REQUIREMENT CHANGE (MAJOR/MINOR)

SUBMITTED BY:

<table>
<thead>
<tr>
<th>Department</th>
<th>Construction Trades Technology</th>
<th>College/School</th>
<th>Interior – Aleutians Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by</td>
<td>Michael Hirt</td>
<td>Phone</td>
<td>907-474-6764</td>
</tr>
<tr>
<td>Email Contact</td>
<td><a href="mailto:mjhirt@alaska.edu">mjhirt@alaska.edu</a></td>
<td>Faculty Contact</td>
<td>Michael Hirt</td>
</tr>
</tbody>
</table>

See http://www.uaf.edu/uafigov/faculty/cd for a complete description of the rules governing curriculum & course changes.

PROGRAM IDENTIFICATION:

<table>
<thead>
<tr>
<th>DEGREE PROGRAM</th>
<th>Construction Trades Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Level: (i.e., Certificate, A.A., A.A.S., B.A., B.S., M.A., M.S., Ph.D.)</td>
<td>Certificate</td>
</tr>
</tbody>
</table>

A. CHANGE IN CERTIFICATE REQUIREMENTS: (Brief statement of program/degree changes and objectives)

Facility Maintenance and Sustainable Energy have been added as concentrations for a certificate and the existing Carpentry requirements will be transformed into a concentration, making a total of three. The certificate name will remain the same, Construction Trades Technology.

B. CURRENT REQUIREMENTS AS IT APPEARS IN THE CATALOG:

Construction Trades Technology

College of Rural and Community Development
Interior-Aleutians Campus
907-474-5439
www.uaf.edu/jac/

Certificate: A.A.S. Degree

Downloadable PDF

Minimum Requirements for Certificate: 36.5 credits; for Degree: 70 - 73 credits

The construction trades technology program is designed to prepare students to work in the construction industry. The program prepares students for employment in areas where there is a projected shortage of skilled workers.

This program provides students with fundamental knowledge of construction industry expectations as well as hands-on training. It responds to the skills targeted by Alaskan employers. Students completing the certificate program will have completed the first year of the A.A.S. degree program. Graduates of the A.A.S. degree program may pursue opportunities with employers as they acquire a higher level of residential construction trade and/or residential construction management skills.

A strong desire to work in the construction industry is important. Students must be willing to work collaboratively with industry employees in their local communities in
order to fulfill the practicum components of courses.

Certificate Program

1. Complete the **general university requirements**.

2. Complete the **certificate requirements**. (As part of the certificate requirement, complete 3 credits each in the communication and human relations requirements.)

3. Complete 3 credits from one of the following computation courses:
   CTT F106--Construction Mathematics (3)
   or TTCH F131--Mathematics for the Trades (3)--3 credits

4. Complete the following program (major) requirements:
   CTT F100--Construction Technology Core (3)
   or CTT F101--Basic Construction Safety (1)
   and CTT F102--Introduction to Hand and Power Tools (1)
   and CTT F103--Introduction to Blueprint Reading (1)
   CTT F110--Residential Carpentry -- Level One (8.5)
   or CTT F111--Materials and Tools Used in the Trade (2.5)
   and CTT F112--Floor Systems, Wall and Ceiling Framing (2)
   and CTT F113--Roof Framing, Windows and Exterior Doors (2)
   and CTT F114--Introduction to Concrete Materials and Forms (2)--8.5 credits
   CTT F115--Residential Carpentry -- Level Two (12)
   or CTT F116--Reading Plans and Site Layout -- Level One (2)

   and CTT F117--Exterior Finish and Moisture Protection (2)
   and CTT F118--Roofing, Stairs and Metal Studs Applications (3)
   and CTT F119--Drywall and Interior Finish Applications (5)--12 credits
   CTT F199--Student Practicum I--3 credits
   HLTH F122--First Aid and CPR--1 credit

5. Minimum credits required--36.5 credits

---

**Proposed requirements as it will appear in the catalog with these changes:**
(Underline new wording, strike-through old wording and use complete catalog format)

**Construction Trades Technology**

College of Rural and Community Development
Bristol Bay Campus – Sustainable Energy Concentration 907-842-5109
www.uaf.edu/bbc/
Interior-Aleutians Campus – Carpentry and Facilities Maintenance 907-474-5439
Certificate: A.A.S. Degree

Downloadable PDF

Minimum Requirements for Certificate: 36.5 credits; for Degree: 70 - 73 credits

The construction trades technology program is designed to prepare students to work in the construction industry. The program prepares students for employment in areas where there is a projected shortage of skilled workers.

This program provides students with fundamental knowledge of construction industry expectations, in the concentrations of Carpentry, Facility Maintenance and Sustainable Energy, as well as hands-on training. It responds to the skills targeted by Alaskan employers. Students completing the certificate program will have completed the first year of the A.A.S. degree program. Graduates of the A.A.S. degree program may pursue opportunities with employers as they acquire a higher level of residential construction trade and/or residential construction management skills.

A strong desire to work in the construction industry is important. Students must be willing to work collaboratively with industry employees in their local communities in order to fulfill the practicum components of courses.

Certificate Program

1. Complete the general university requirements.

2. Complete the certificate requirements. (As part of the certificate requirement, complete 3 credits each in the communication and human relations requirements.)

3. Complete 3 credits from one of the following computation courses:*  
   CTT F106--Construction Mathematics (3)  
   or TTCH F131--Mathematics for the Trades (3)--3 credits

4. Complete the following program (major) requirements:*  
   CTT F100--Construction Technology Core (3)  
   or CTT F101--Basic Construction Safety (1)  
   and CTT F102--Introduction to Hand and Power Tools (1)  
   and CTT F103--Introduction to Blueprint Reading (1)

   CTT F110--Residential Carpentry—Level One (8.5)  
   — or CTT F111--Materials and Tools Used in the Trade (2.5)  
   — and CTT F112--Floor Systems, Wall and Ceiling Framing (2)  
   — and CTT F113--Roof Framing, Windows and Exterior Doors (2)  
   — and CTT F114--Introduction to Concrete Materials and Forms (2)--8.5 credits

   CTT F115--Residential Carpentry—Level Two (12)  
   — or CTT F116--Reading Plans and Site Layout—Level One (2)  
   — and CTT F117--Exterior Finish and Moisture Protection (2)  
   — and CTT F118--Roofing, Stairs and Metal Studs Applications (3)  
   — and CTT F119--Drywall and Interior Finish Applications (5)--12 credits
HLTH F122--First Aid and CPR - (1) credit

1. – 4. Minimum credits required 13 credits

5. Complete one of the following concentrations:*

Minimum credits required—36.5 credits

**Carpentry**

CTT F110--Residential Carpentry -- Level One (8.5)
   — or CTT F111--Materials and Tools Used in the Trade (2.5)
   — and CTT F112--Floor Systems, Wall and Ceiling Framing (2)
   — and CTT F113--Roof Framing, Windows and Exterior Doors (2)
   — and CTT F114--Introduction to Concrete Materials and Forms (2)—8.5 credits

CTT F115--Residential Carpentry -- Level Two (12)
   — or CTT F116--Reading Plans and Site Layout -- Level One (2)
   — and CTT F117--Exterior Finish and Moisture Protection (2)
   — and CTT F118--Roofing, Stairs and Metal Studs Applications (3)
   — and CTT F119--Drywall and Interior Finish Applications (5)—12 credits

CTT F199--Student Practicum I (1-3) credits;

Minimum Carpentry credits required: 21.5 – 23.5 credits

**Facility Maintenance**

CTT F130--Introduction to Facilities Maintenance—(1) credit

CTT F131--Interior Repairs: Drywall, Woodwork Trim, Window Replacement(1) credit

CTT F132--Flooring Installations: Vinyl, Wood and Parquet—(1) credit

CTT F133--Cabinet Installation with Countertops—(1) credit

CTT F135--Boiler Troubleshooting and Burner Repair—(2) credits

CTT F137--Appliance Troubleshooting and Repair—(2) credits

CTT F138--Residential Heating Controls—(2) credits

CTT F151--Introduction to Plumbing Tools and Drawings—(1) credit

CTT F153--Plastic and Copper Pipe and Fittings—(1) credit

and other advisor approved electives related to the concentration—(3) credits

CTT F199--Student Practicum I, (1-3) credits Students must take a minimum of 2 credits in CTT F199 practicum.

Minimum Facility Maintenance credits required: 17-18 credits
**Sustainable Energy**

Required courses:

DEVM F105—Intermediate Algebra (3)
ENVI F220—Intro to Sustainable Energy (3)

Complete at least 9 credits from the following courses:

CT S201—Cold Climate Construction (3)**
CTT F100—Construction Technology Core (3)
CTT F160—Photovoltaic Systems – Part I (5)
CTT F161—Photovoltaic Systems – Part II (5)
CTT F250—Current Topics in Construction Trades (1-3)
ENVI F101—Introduction to Environmental Science (3)
ENVI F120—Home Energy Basics (1)
PHYS F102X—Energy and Society (4)
or other advisor approved courses related to the concentration.................(9)

CTT F199—Student Practicum I (1-3) credits Students must take a minimum of 2
credits in CTT F199 practicum.

Minimum Sustainable Energy credits required......................17-18

6. Minimum credits required........................................30-36.5 credits

* Students must earn a C grade (2.0) or better in each course.

** CT S201 is offered by University of Alaska Southeast

---

**D. ESTIMATED IMPACT**

**WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.**

This change is expected to have no impact on budget, facilities, space or faculty.

---

**E. IMPACTS ON PROGRAMS/DEPTS:**

What programs/departments will be affected by this proposed action?
Include information on the Programs/Departments contacted (e.g., email, memo)

Interior-Aleutians and Bristol Bay Campuses worked extensively with each other to develop the Sustainable Energy Occupational Endorsement. They are aware and fully support the idea to make these three concentrations part of the certificate

Construction Trades Technology Program Head, Michael Hirt, mjhirt@alaska.edu
Bristol Bay Campus, Tom Marsik, Ph.D, Sustainable Energy, tmarsik@alaska.edu.
The SLOA should not change as the different concentrations all require practicum, the direct assessment.

Both students and contractors are interested in and support the concentrations for building maintenance and sustainable energy as well as the original carpentry concentration. Each of these areas of concentration have common roots with the basic requirements and therefore it makes sense to offer each as a concentration within a certificate. These additional concentrations address rural employment needs and are designed to provide rural students with the skills to meet employer expectations.