

College of Agriculture and Applied Sciences

School of Aviation and Technology Education

Assessment plan for:

Building Construction and Construction
Management

Fall 2021

Blanding, Moab

Program Description:

Building construction is the process of adding structure or construction of buildings. Building construction labor jobs range from small remodels or additions to large or commercial buildings. This is different from heavy construction, which is normally referred to as highway, pipeline, reservoir, or industrial construction. The Blanding and Moab building construction programs are focused mostly on skills and knowledge based around the building of residential buildings. There are some transferrable skills to other areas in commercial or heavy construction.

The original Building Construction and Construction Management program began long ago as part of the Southeast Applied Technology College (SEATC). That institution, originally a Utah College of Applied Technology (UCAT), was absorbed into CEU in 2008. CEU merged with USU in 2010. When the SEATC became part of CEU and then CEU became part of USU in 2010.

Originally, there were four Building Construction and Construction Management programs working for the applied tech college administered out of Price in four southeast Utah communities - Price (Carbon County), Castle Dale (Emery County), Moab (Grand County), and Blanding (San Juan County). About 2010, after the CEU/USU merger, USU Eastern at Price transferred the administrative duties for the Building Construction and Construction Management program at the USU Blanding specifically to Justin Bergeman. In 2021, the Moab Building Construction program was reassigned from management at USU Eastern in Price to Justin Bergeman at USU Blanding. The Moab building construction program is currently in transition as the program has been idled for a few years while the new Moab Campus building is being built. The building construction instructor in Moab resigned in 2021. With the completion of the Moab Campus, Building Construction courses are planned to resume Fall 2022.

The program in Blanding has multiple stacked options between gaining a certificate, adding experience and completion of the Applied Associate Degree.

Semester 1 and 2 students can accomplish the BCCM Certificate of Completion (Stacks into AAS)

After semester 1, students can apply for an internship, used in conjunction with TESY 2940 Industry Experience Course students can gain real world experience and be paid, depending on project availability. If a house is used as a learning project, interns may be hired to help keep the house on a curriculum schedule. After students have completed the internship and the building construction CC, they may have an option to advance to a temporary construction worker position to aid in keeping the learning projects on schedule. This works very well for students who are continuing to work on the associates degree or even on to their bachelors degree.

The current model, where students can work on the CC, participate as an intern, move to construction worker has had the highest program employment outcome.

**Historic employment placement data show above 60%, currently surveys with former students is under way for updated placement numbers.*

USU Catalog Information

About this Degree: The Building Construction and Construction Management Program offers a one-year Certificate of Completion.

Students who complete the certificate program will have a basic knowledge in architectural drawings, floor layout, wall and roof systems, siding application, soffit and fascia applications, and the installation of siding, windows, doors, stairs and interior trim.

- BCCM 1010 - Building Construction Safety **1**
- BCCM 1150 - Basic Print Reading **2**
- BCCM 2010 - Framing I **2**
- BCCM 2030 - Framing II **2**
- BCCM 2080 - Concrete I **2**
- BCCM 2090 - Concrete II **2**
- BCCM 2100 - Interior Finish I **2**
- BCCM 2110 - Interior Finish II **2**
- BCCM 2170 - Exterior Finish I **2**
- BCCM 2180 - Exterior Finish II **2**
- BCCM 2240 - Construction Estimating **3**
- BCCM 2270 - Building Codes and Inspections **2**
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- BUSN 1050 - Business Mathematics **3 or**
- MATH 1020 - Trade Mathematics **3**
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- BUSN 2320 - Small Business Management - CTE (HR) **3**

Optional Facilities and Maintenance Focus

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- BCCM 2340 - Heating, Ventilating, and Air Conditioning Maintenance (HVAC) I_2
 - BCCM 2350 - Electrical Maintenance I **2**
 - HETR 1640 - Hydraulic Excavator Operation **2**
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- Courses which are offered as electives in Facility Maintenance or BCCM
- BCCM 2320 Plumbing Maintenance.
 - BCCM 2988 Skid Steer/ Compact Loader Operation
 - BCCM 2988 Aerial Boom Lift/Scissor Lift Operation

The following assessment portion was completed by program instructor(s)

Student Learning Outcomes (What)

1. Safely work on a residential construction site
2. Apply building construction practices and codes
3. Entry level Construction worker or Continue education

Plan for Assessing Each Student Learning Outcome (How)

Assessment Planning	Learning Outcome #1	Learning Outcome #2	Learning Outcome #3
Method for assessing learning (at least one direct measure required)	Jobsite Hazard Analyses	Hands on Construction work	Tests and on-site recognition
Timetable for assessment activity (at least one activity each academic year)	Week # 3	Week # 7	Week# 10

Curriculum Mapping Worksheet (Where)

Key: "I"=Introduced; "R"=Reinforced/Practiced; "A"=Assessed and Evidence Collected

Curriculum Map (Where)	Student Learning Outcomes				
	Learning Outcome #1	Learning Outcome #2	Learning Outcome #3	Learning Outcome #4	Learning Outcome #5
Degree Program Courses or Experiences					
BCCM 1010	Proper use of tools	Proper use of P.P.E	Jobsite Hazard Analysis	Safety Meeting planning	Conduct a safety meeting
BCCM 1150	Reading Plan Symbols and abbreviations	Recognizing line types	Interpretations of blueprints	Understanding Plan Views	Overall understanding of blueprints
BCCM 2010	Understanding Framing Terminology	Framing tool safety	Wall stud Layout	Understanding of framing codes	Framers helper
BCCM 2030	Framing components	Door and window openings	Wall sheeting	Codes for nailing patterns	Entry level framer
BCCM 2080	Batter boards	Types of foundations	Forming Methods	Establishing Grades and setbacks	Entry level concrete laborer
BCCM 2090	Setting forms	Concrete reinforcing	Finishing Concrete	Figuring Yardage	Entry level concrete finisher

BCCM 2100	Understanding of R-Values	Installing Drywall	Mudding Drywall	Installing insulation	Entry level drywall helper
BCCM 2110	Installation of interior doors	Installation of base board and casing	Preparation of walls for paint	Painting walls and trim	Finish carpenter assistant
BCCM 2170	Identifying Types of exterior finishes	Fascia and Soffit	Identifying Roof covering materials	Installation of asphalt shingles	Roofers laborer
BCCM 2180	Installing exterior door and windows	Cutting and Bending Metals	Identifying types of exterior finishes	Applying stucco	
BCCM 2500	Residential construction practices	Jobsite safety and Cleanup	Applying Codes and Terminology	Care and maintenance of tools	Jobsite superintendents assistant
BCCM 2130	Construction practices	Jobsite safety and clean up	Tool use and Storage	Construction laborer	
BCCM 2015	Masonry terminology	Identify Masonry Tools	Brick laying	Block laying	Mason Laborer
BCCM 2120	Builders Levels and Transits	Layout on a building lot	Squaring and leveling a building	Establishing grades on a building lot	Site layout Laborer