**SKILLS CERTIFICATES**

Skills certificates are intended to provide preparation necessary to take state, national, and/or industry recognized certification or licensing examinations. Some may also serve as a stackable credential within existing associate degree tracks. Skills Certificates are less than 30 credit hours and are more narrow in focus than Certificates of Achievement. Please note that while skills certificates provide the instruction and training, CSN does not guarantee a student will pass the intended certification or licensing exam.

Upon successful completion of all course requirements, skills certificates will appear at the end of the final semester on the transcript, however diplomas are not issued for Skills Certificates.

### Apprenticeship Skills Certificates

#### BRICKLAYER – JOURNEYMAN

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRL 101B</td>
<td>4</td>
</tr>
<tr>
<td>BRL 102B</td>
<td>4</td>
</tr>
<tr>
<td>BRL 105B</td>
<td>3</td>
</tr>
<tr>
<td>BRL 151B</td>
<td>4</td>
</tr>
<tr>
<td>BRL 152B</td>
<td>4</td>
</tr>
<tr>
<td>BRL 201B</td>
<td>4</td>
</tr>
<tr>
<td>BRL 202B</td>
<td>4</td>
</tr>
</tbody>
</table>

Total: 27

#### CEMENT MASON – JOURNEYMAN

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA 111B</td>
<td>4</td>
</tr>
<tr>
<td>CMA 112B</td>
<td>3</td>
</tr>
<tr>
<td>CMA 141B</td>
<td>3</td>
</tr>
<tr>
<td>CMA 142B</td>
<td>4</td>
</tr>
<tr>
<td>CMA 201B</td>
<td>3</td>
</tr>
<tr>
<td>CMA 202B</td>
<td>4</td>
</tr>
<tr>
<td>CMA 251B</td>
<td>3</td>
</tr>
<tr>
<td>CMA 252B</td>
<td>4</td>
</tr>
</tbody>
</table>

Total: 27

#### FLOOR COVERER – JOURNEYMAN

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLCV 100B</td>
<td>1</td>
</tr>
<tr>
<td>FLCV 111B</td>
<td>3</td>
</tr>
<tr>
<td>FLCV 121B</td>
<td>5</td>
</tr>
<tr>
<td>FLCV 131B</td>
<td>5</td>
</tr>
<tr>
<td>FLCV 141B</td>
<td>3</td>
</tr>
<tr>
<td>FLCV 200B</td>
<td>2</td>
</tr>
<tr>
<td>FLCV 211B</td>
<td>2</td>
</tr>
<tr>
<td>FLCV 221B</td>
<td>4</td>
</tr>
<tr>
<td>FLCV 231B</td>
<td>2</td>
</tr>
</tbody>
</table>

Total: 2

#### PAINTER – JOURNEYMAN

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTD 101B</td>
<td>Painting/Decorating Apprentice I 4</td>
</tr>
<tr>
<td>PTD 102B</td>
<td>Painting/Decorating Apprentice IB 4</td>
</tr>
<tr>
<td>PTD 105B</td>
<td>OSHA 10/First Aid/CPR 1</td>
</tr>
<tr>
<td>PTD 151B</td>
<td>Painting/Decorating Apprentice II 4</td>
</tr>
<tr>
<td>PTD 152B</td>
<td>Painting/Decorating Apprentice IIB 4</td>
</tr>
<tr>
<td>PTS 155B</td>
<td>Respirators/Lead Abatement 1</td>
</tr>
<tr>
<td>PTD 201B</td>
<td>Painting/Decorating Apprentice III 4</td>
</tr>
<tr>
<td>PTD 202B</td>
<td>Painting/Decorating Apprentice IIB 4</td>
</tr>
<tr>
<td>PTD 205B</td>
<td>Heavy Equipment Operation 1</td>
</tr>
<tr>
<td>PTD 255B</td>
<td>COMET 1</td>
</tr>
</tbody>
</table>

Total: 28

#### RESIDENTIAL WIREMAN – JOURNEYMAN

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 115B</td>
<td>Residential Apprentice I 4</td>
</tr>
<tr>
<td>ELEC 116B</td>
<td>Residential Apprentice II 4</td>
</tr>
<tr>
<td>ELEC 117B</td>
<td>Residential Apprentice III 4</td>
</tr>
<tr>
<td>ELEC 118B</td>
<td>Residential Apprentice IV 4</td>
</tr>
<tr>
<td>ELEC 119B</td>
<td>Residential Apprentice V 4</td>
</tr>
<tr>
<td>ELEC 120B</td>
<td>Residential Apprentice VI 4</td>
</tr>
<tr>
<td>ELEC 127B</td>
<td>Mobile Equipment Safety 1</td>
</tr>
<tr>
<td>ELEC 137B</td>
<td>OSHA 30 2</td>
</tr>
</tbody>
</table>

Total: 27

#### TEAMSTERS – JOURNEYMAN

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMST 100B</td>
<td>OSHA General Industry Class 1</td>
</tr>
<tr>
<td>TMST 120B</td>
<td>Introduction to the Convention Industry 2</td>
</tr>
<tr>
<td>TMST 130B</td>
<td>Beginning Decorating 2</td>
</tr>
<tr>
<td>TMST 140B</td>
<td>Beginning Systems 1</td>
</tr>
<tr>
<td>TMST 150B</td>
<td>Beginning Design and Repair 2</td>
</tr>
<tr>
<td>TMST 160B</td>
<td>Beginning Installation and Dismantle 2</td>
</tr>
<tr>
<td>TMST 170B</td>
<td>Forklift Theory 3</td>
</tr>
<tr>
<td>TMST 200B</td>
<td>Advanced Forklift 3</td>
</tr>
<tr>
<td>TMST 220B</td>
<td>Advanced Installation and Dismantle 3</td>
</tr>
<tr>
<td>TMST 230B</td>
<td>Lead Foreman Training 2</td>
</tr>
<tr>
<td>TMST 240B</td>
<td>First Aid/CPR 1</td>
</tr>
<tr>
<td>TMST 250B</td>
<td>Condor Operating 3</td>
</tr>
<tr>
<td>TMST 260B</td>
<td>Rigging 1</td>
</tr>
<tr>
<td>TMST 270B</td>
<td>Scissor Lift 1</td>
</tr>
</tbody>
</table>

Total: 27

#### TILE SETTER – JOURNEYMAN

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLS 101B</td>
<td>Tile Setter Apprentice I 4</td>
</tr>
<tr>
<td>TLS 102B</td>
<td>Tile Setter Apprentice IB 4</td>
</tr>
<tr>
<td>TLS 105B</td>
<td>OSHA/First Aid/CPR for Tile Setters 3</td>
</tr>
<tr>
<td>TLS 151B</td>
<td>Tile Setter Apprentice II 4</td>
</tr>
<tr>
<td>TLS 152B</td>
<td>Tile Setter Apprentice IIB 4</td>
</tr>
<tr>
<td>TLS 201B</td>
<td>Tile Setter Apprentice III 4</td>
</tr>
<tr>
<td>TLS 202B</td>
<td>Tile Setter Apprentice IIIB 4</td>
</tr>
</tbody>
</table>

Total: 27
Bricklayers
ASSOCIATE OF APPLIED SCIENCE (AAS)

REQUIRED CREDITS: 60
DEGREE CODE: BRCKTD-AAS

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Bricklayer with the Bricklayers Union. This is a restricted entry program. Students MUST be indentured in the Bricklayers Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing related math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable bricklayer tools.
• Comprehend and utilize formulas used in the calculations of all phases of brick laying.
• Demonstrate the ability to troubleshoot and repair any problems that arise with brick laying installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (33 CREDITS)

MATHEMATICS (3 credits)
MATH 116

ENGLISH COMPOSITION (6 credits)
ENG 101 or 102 or 107

COMMUNICATIONS (6 credits)
COM 101 or 215; or ENG 101

HUMAN RELATIONS (3 credits)
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B

NATURAL SCIENCE (8 credits)
AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA CONSTITUTIONS (4-6 credits)
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

BRL 101B Bricklayers’ Apprentice I 4
BRL 102B Bricklayers’ Apprentice IB 4
BRL 105B OSHA/First Aid/CPR for Bricklayers 3
BRL 151B Bricklayers’ Apprentice II 4
BRL 152B Bricklayers’ Apprentice IIB 4
BRL 201B Bricklayers’ Apprentice III 4
BRL 202B Bricklayers’ Apprentice IIIIB 4

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any BRL journeyman course offered for credit may be substituted for any of the above BRL apprentice courses. Please contact the program coordinator for more details.
  Special consideration will be given students who complete the Bricklayers’ Trade Associate of Applied Science Degree if they are affected by the retroactive six year rule.
Program Description
This program prepares students for employment as a Journeyman Bricklayer with the Bricklayers Union. This is a restricted entry program. Students MUST be indentured in the Bricklayers Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

Student Learning Outcomes
- Comprehend and utilize all applicable brick laying tools.
- Comprehend and utilize formulas used in the calculations of all phases of brick laying.
- Comprehend the ability to troubleshoot and repair any problems that arise with brick laying installations.

Please Note - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

General Education Requirements (3 Credits)

Communications (3 credits)
COM 101 or 215; or ENG 101

Special Program Requirements (27 Credits)

BRL 101B  Bricklayers’ Apprentice I  4
BRL 102B  Bricklayers’ Apprentice IB  4
BRL 105B  OSHA/First Aid/CPR  3
for Bricklayers
BRL 151B  Bricklayers’ Apprentice II  4
BRL 152B  Bricklayers’ Apprentice IIB  4
BRL 201B  Bricklayers’ Apprentice III  4
BRL 202B  Bricklayers’ Apprentice IIB  4

Computation included in BRL 101B, 102B, 151B, 152B, 201B, 202B

Human Relations included in BRL 101B, 102B

Note - Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any BRL journeyman course offered for credit may be substituted for any of the above BRL apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Bricklayers’ Certificate of Achievement if they are affected by the retroactive six year rule.
Carpentry

ASSOCIATE OF APPLIED SCIENCE (AAS)

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Carpenter with the Carpenters Union. This is a restricted entry program. Students MUST be indentured in the Carpenters Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing related math, science and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable carpentry tools.
• Comprehend and utilize formulas used in the calculations of all phases of carpentry work.
• Demonstrate the ability to troubleshoot and repair any problems that arise with carpentry installations.

PLEASE NOTE • The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (25 CREDITS)

MATHEMATICS (3 credits)
MATH 116

ENGLISH COMPOSITION (3 credits)
ENG 101 or 102 or 107

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

HUMAN RELATIONS (3 credits)
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B

NATURAL SCIENCE (6-7 credits)
AST 101; BIOL 101; CHEM 103; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA CONSTITUTIONS (4-6 credits)
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

CORE REQUIREMENTS
CPT 102B Orientation 2
CPT 104B Safety and Health Certifications 2
CPT 105B Basic Wall Framing 1.5
CPT 107B Print Reading 2
CPT 109B Basic Roof Framing 1.5
CPT 111B Wall Forming 1.5
CPT 113B Doors and Door Frames 1.5
CPT 115B Transit Level/Laser 2
CPT 117B Foundations and Flat Work 1.5
CPT 119B Bridge Construction 1.5
CPT 121B Stair and Ramp Forming 1.5
CPT 123B Beam and Deck Forming 1.5
CPT 125B Cabinet Millwork and Assembly 1.5
CPT 127B Commercial Floor Framing 1.5
CPT 129B Advanced Print Reading 2
CPT 131B Cabinet Installation 2

CHOOSE ELECTIVES (8 credits)
CPT 133B Moldings and Trim 1.5
CPT 135B Tilt-Up Panel Construction 1.5
CPT 137B Rigging 2
CPT 141B Basic Metal Framing 1.5
CPT 143B Door and Door Hardware 1.5
CPT 145B Scaffold Erector Qualification 2

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.

• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.

• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.

• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.

• Any CPT journeyman course offered for credit may be substituted for any of the above CPT apprentice courses. Please contact the program coordinator for more details.

Special consideration will be given students who complete the Carpentry Trade Associate of Applied Science if they are affected by the retroactive six year rule.
Carpentry

CERTIFICATE OF ACHIEVEMENT (CA)

REQUIRED CREDITS: 30

DEGREE CODE: CART-CT

PROGRAM DESCRIPTION
This program prepares students for employment as a Journeyman Carpenter with the Carpenters Union. This is a restricted entry program. Students MUST be indentured in the Carpenters Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable carpentry tools.
• Comprehend and utilize formulas used in the calculations of all phases of carpentry work.
• Comprehend the ability to troubleshoot and repair any problems that arise with carpentry installations.

PLEASE NOTE • The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

| CPT 102B | Orientation | 2          |
| CPT 104B | Safety and Health Certifications | 2          |
| CPT 105B | Basic Wall Framing | 1.5         |
| CPT 107B | Print Reading | 2          |
| CPT 109B | Basic Roof Framing | 1.5         |
| CPT 111B | Wall Forming | 1.5         |
| CPT 113B | Doors and Door Frames | 1.5         |
| CPT 115B | Transit Level/Laser | 2          |
| CPT 117B | Foundations and Flatwork | 1.5         |
| CPT 119B | Bridge Construction | 1.5         |
| CPT 121B | Stair and Ramp Forming | 1.5         |
| CPT 123B | Beam and Deck Forming | 1.5         |
| CPT 125B | Cabinet Millwork and Assembly | 1.5         |
| CPT 127B | Commercial Floor Framing | 1.5         |
| CPT 129B | Advanced Print Reading | 2          |
| CPT 131B | Cabinet Installation | 2          |

Computation included in CPT 105B, 109B, 117B, 121B
Human Relations included in CPT 102B, 104B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any CPT journeyman course offered for credit may be substituted for any of the above CPT apprentice courses. Please contact the program coordinator for more details.
Special consideration will be given students who complete the Carpentry Trades Certificate of Achievement if they are affected by the retroactive six year rule.
Cement Mason
ASSOCIATE OF APPLIED SCIENCE (AAS)

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Cement Mason with the Cement Masons Union. This is a restricted entry program. Students MUST be indentured in the Cement Masons Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing related math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable masonry tools.
• Comprehend and utilize formulas used in the calculations of all phases of masonry work.
• Demonstrate the ability to troubleshoot and repair any problems that arise with cement masonry installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (30 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATHEMATICS (3 credits)</td>
<td>MATH 116</td>
<td></td>
</tr>
<tr>
<td>ENGLISH COMPOSITION (3 credits)</td>
<td>ENG 101 or 102 or 107</td>
<td></td>
</tr>
<tr>
<td>COMMUNICATIONS (6 credits)</td>
<td>COM 101, 215; ENG 101</td>
<td></td>
</tr>
<tr>
<td>HUMAN RELATIONS (3 credits)</td>
<td>MGT 100B or PSY 101 or SOC 101</td>
<td></td>
</tr>
<tr>
<td>NATURAL SCIENCE (8 credits)</td>
<td>EGG 131 and 132</td>
<td></td>
</tr>
<tr>
<td>FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)</td>
<td>ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101</td>
<td></td>
</tr>
<tr>
<td>U.S. AND NEVADA CONSTITUTIONS (4-6 credits)</td>
<td>PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217</td>
<td></td>
</tr>
</tbody>
</table>

SPECIAL PROGRAM REQUIREMENTS (30 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA 111B</td>
<td>Cement Mason Apprentice I</td>
<td>4</td>
</tr>
<tr>
<td>CMA 112B</td>
<td>Cement Mason Apprentice IB</td>
<td>3</td>
</tr>
<tr>
<td>CMA 141B</td>
<td>Cement Mason Apprentice II</td>
<td>3</td>
</tr>
<tr>
<td>CMA 142B</td>
<td>Cement Mason Apprentice IIIB</td>
<td>4</td>
</tr>
<tr>
<td>CMA 201B</td>
<td>Cement Mason Apprentice III</td>
<td>3</td>
</tr>
<tr>
<td>CMA 202B</td>
<td>Cement Mason Apprentice IIIIB</td>
<td>4</td>
</tr>
<tr>
<td>CMA 251B</td>
<td>Cement Mason Apprentice IV</td>
<td>3</td>
</tr>
<tr>
<td>CMA 252B</td>
<td>Cement Mason Apprentice IVB</td>
<td>4</td>
</tr>
<tr>
<td>PLCM 270B</td>
<td>OSHA 30</td>
<td>2</td>
</tr>
</tbody>
</table>

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
• For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any CMA journeyman course offered for credit may be substituted for any of the above CMA apprentice courses. Please contact the program coordinator for more details.
Special consideration will be given students who complete the Cement Mason Apprentice Associate of Applied Science Degree if they are affected by the retroactive six year rule.
### General Education Requirements (3 Credits)

**Communications (3 credits)**
- COM 101 or 215; or ENG 101

### Special Program Requirements (28 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA 111B</td>
<td>Cement Mason Apprentice I</td>
<td>4</td>
</tr>
<tr>
<td>CMA 112B</td>
<td>Cement Mason Apprentice IB</td>
<td>3</td>
</tr>
<tr>
<td>CMA 141B</td>
<td>Cement Mason Apprentice II</td>
<td>3</td>
</tr>
<tr>
<td>CMA 142B</td>
<td>Cement Mason Apprentice IIB</td>
<td>4</td>
</tr>
<tr>
<td>CMA 201B</td>
<td>Cement Mason Apprentice III</td>
<td>3</td>
</tr>
<tr>
<td>CMA 202B</td>
<td>Cement Mason Apprentice IIIB</td>
<td>4</td>
</tr>
<tr>
<td>CMA 251B</td>
<td>Cement Mason Apprentice IV</td>
<td>3</td>
</tr>
<tr>
<td>CMA 252B</td>
<td>Cement Mason Apprentice IVB</td>
<td>4</td>
</tr>
</tbody>
</table>

Computation included in CMA 141B, 142B
Human Relations included in CMA 111B, 112B, 142B, 201B, 202B, 251B

### Program Description

This program prepares students for employment as a Journeyman Cement Mason with the Cement Masons Union. **This is a restricted entry program. Students MUST be indentured in the Cement Masons Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

### Student Learning Outcomes

- Comprehend and utilize all applicable masonry tools.
- Comprehend and utilize formulas used in the calculations of all phases of masonry work.
- Comprehend the ability to troubleshoot and repair any problems that arise with cement masonry installations.

**PLEASE NOTE** - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

### Note

- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any CMA journeyman course offered for credit may be substituted for any of the above CMA apprentice courses. Please contact the program coordinator for details.

Special consideration will be given students who complete the Cement Mason Certificate of Achievement if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This degree prepares the students for employment as a Journeyman Drywall Applicator with the Carpenters Union. **This is a restricted entry program. Students MUST be indentured in the Carpenters Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills emphasizing math, science, and human relations are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable drywall applicator tools.
- Comprehend and utilize formulas used in the calculations of all phases of drywall applicator work.
- Demonstrate the ability to troubleshoot and repair any problems that arise in drywall applicator work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (25 CREDITS)

**MATHEMATICS (3 credits)**
MATH 116

**ENGLISH COMPOSITION (3 credits)**
ENG 101 or 102 or 107

**COMMUNICATIONS (3 credits)**
COM 101 or 215; or ENG 101

**HUMAN RELATIONS (3 credits)**
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B

**NATURAL SCIENCE (6-7 credits)**
AST 101; BIOL 101; CHEM 103; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

**FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)**
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

**U.S. AND NEVADA CONSTITUTIONS (4-6 credits)**
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

**CORE REQUIREMENTS (27 credits)**
CPT 102B Orientation 2
CPT 104B Safety and Health Certifications 2
CPT 107B Print Reading 2
CPT 113B Door and Door Frames 1.5
CPT 129B Advanced Print Reading 2
DWA 105B Basic Metal Framing 1.5
DWA 109B Basic Lathing 1.5
DWA 111B Drywall Application 1.5
DWA 113B Drywall Application/Finish Trims 1.5
DWA 115B Framing Ceilings and Sofits 1.5
DWA 117B Framing Curves and Arches 1.5
DWA 119B Framing Suspended Ceilings 1.5
DWA 121B Advanced Metal Framing 1.5
DWA 125B Drywall/Acoustical Ceilings 1.5
DWA 129B Free-Form Lathing 2
DWA 131B Light Gage Welding - AWS 2

**CHOOSE ELECTIVES (8 credits)**
CPT 137B Rigging 2
CPT 145B Scaffold Erector Qualification 2
DWA 139B Light Gage Welding - AWS A 1.5
DWA 141B Exterior Insulation Finish Systems - EIFS 1.5
DWA 143B Door and Door Frames 1.5
DWA 145B Transit Level/Laser 2

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any DWA journeyman course offered for credit may be substituted for any of the above DWA apprentice courses. Please contact the program coordinator for more details.
  Special consideration will be given students who complete the Drywall Applicator Associate of Applied Science Degree if they are affected by the retroactive six year rule.
Drywall Applicator
CERTIFICATE OF ACHIEVEMENT (CA)

REQUIRED CREDITS: 30
DEGREE CODE: DWA-CT

PROGRAM DESCRIPTION
This program prepares students for employment as a Journeyman Drywall Applicator with the Carpenters Union. This is a restricted entry program. Students MUST be indentured in the Carpenters Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing related math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable drywall applicator tools.
• Comprehend and utilize formulas used in the calculations of all phases of drywall applicator work.
• Comprehend the ability to troubleshoot and repair any problems that arise with drywall applicator installations.

PLEASE NOTE • The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

<table>
<thead>
<tr>
<th>COMMUNICATIONS (3 credits)</th>
<th>SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td>CPT 102B Orientation 2</td>
</tr>
<tr>
<td></td>
<td>CPT 104B Safety and Health Certifications 2</td>
</tr>
<tr>
<td></td>
<td>CPT 107B Print Reading 2</td>
</tr>
<tr>
<td></td>
<td>CPT 113B Doors and Door Frames 1.5</td>
</tr>
<tr>
<td></td>
<td>CPT 129B Advanced Print Reading 2</td>
</tr>
<tr>
<td></td>
<td>DWA 105B Basic Metal Framing 1.5</td>
</tr>
<tr>
<td></td>
<td>DWA 109B Basic Lathing 1.5</td>
</tr>
<tr>
<td></td>
<td>DWA 111B Drywall Application 1.5</td>
</tr>
<tr>
<td></td>
<td>DWA 113B Drywall Installation/Finish Trims 1.5</td>
</tr>
<tr>
<td></td>
<td>DWA 115B Framing Ceilings and Soffits 1.5</td>
</tr>
<tr>
<td></td>
<td>DWA 117B Framing Curves and Arches 1.5</td>
</tr>
<tr>
<td></td>
<td>DWA 119B Framing Suspended Ceilings 1.5</td>
</tr>
<tr>
<td></td>
<td>DWA 121B Advanced Metal Framing 1.5</td>
</tr>
<tr>
<td></td>
<td>DWA 125B Drywall/Acoustical Ceilings 1.5</td>
</tr>
<tr>
<td></td>
<td>DWA 129B Free-Form Lathing 2</td>
</tr>
<tr>
<td></td>
<td>DWA 131B Light Gage Welding - AWS 2</td>
</tr>
</tbody>
</table>

Computation included in DWA 117B
Human Relations included in CPT 102B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any DWA journeyman course offered for credit may be substituted for any of the above DWA apprentice courses. Please contact the program coordinator for details.
Special consideration will be given students who complete the Drywall Applicator Certificate of Achievement if they are affected by the retroactive six year rule.
Environmental and Construction Laborer
ASSOCIATE OF APPLIED SCIENCE (AAS)

PROGRAM DESCRIPTION
This degree prepares the student for employment as a Journeyman Laborer with the Laborers Union. This is a restricted entry program. The student MUST be indentured in the Laborers’ Environmental and Construction Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable Laborer tools.
• Comprehend and utilize formulas used in the calculations of all phases of Laborer work.
• Demonstrate the ability to troubleshoot and repair any problems that may arise in Laborer work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (27 CREDITS)

MATHMATICS (3 credits)
MATH 116

ENGLISH COMPOSITION (3 credits)
ENG 101 or 102 or 107

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

HUMAN RELATIONS (3 credits)
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B

NATURAL SCIENCE (8 credits)
AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ANTH 101; ART 160; ECON 100; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA CONSTITUTION (4-6 credits)
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (33 CREDITS)

CORE REQUIREMENTS (14 credits)
APP 102B Introduction to Apprentice Craft 4
APP 104B General Construction 4
APP 105B Concrete Flat Work 2

SPECIAL PROGRAM REQUIREMENTS CONTINUED

APP 107B Concrete Walls and Columns Work 2
APP 127B Rigging and Signaling 2

CHOOSE ELECTIVES (19 credits)
APP 108B Body Mechanics and Fall Protection 1
APP 120B Confined Space Awareness 2
APP 121B Line and Grade 4
APP 122B Oxyfuel Gas Cutting 4
APP 123B Blueprint Reading for Laborers 3
APP 125B Asphalt 2
APP 130B Hazardous Waste Handling for Laborers 4
APP 132B Radiation 1
APP 134B Lead Abatement 2
APP 136B Asbestos Abatement 2
APP 137B Pipe Laying (Gravity Flow) 2
APP 139B Pipe Laying (Pressurized) 2
APP 140B Scaffold Building 2
APP 142B Forklift Operations and Awareness 1
APP 144B Operation of Motor Driven Power Equipment 1
APP 146B Operation of Concrete Core Drilling Saw Cutting and Compaction Equipment 1
APP 150B Mason Tending (Trowel) 2
APP 152B Plaster Tending (Mixing) 2
APP 160B Miners Preparedness and Awareness 4
APP 162B Drilling and Blasting 4
APP 164B Pneumatic Air Tool Handling 2
APP 166B Mine Rescue 1
APP 168B Microbial Remediation 1
APP 200B OSHA for Laborers 2
APP 212B Foreman Preparedness 2
APP 263B Weatherization Installation Technician 5
APP 266B Weatherization Supervisor 3
APP 269B Weatherization Energy Auditor 3

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any APP Journeyman course offered for credit may be substituted for any of the above APP apprentice courses. Please contact the program coordinator for more details.
Special consideration will be given students who complete the Laborer Trades’ Associate of Applied Science Degree if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This program prepares the student for employment as a Journeyman Laborer with the Laborers Union. This is a restricted entry program. The student MUST be indentured in the Laborers’ Environmental and Construction Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Demonstrate an understanding of all OSHA regulations and concrete codes applicable to laborers.
- Demonstrate an understanding of sealing the building envelope in determining what weatherization solutions are applicable.
- Demonstrate an understanding of how to recognize hazardous building materials containing asbestos and/or lead.

PLEASE NOTE • The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

CORE REQUIREMENTS (14 credits)
APP 102B Introduction to Apprentice Craft 4
APP 104B General Construction 4
APP 105B Concrete Flat Work 2
APP 107B Concrete Walls and Columns Work 2
APP 127B Rigging and Signaling 2

CHOOSE ELECTIVES (13 credits)
APP 108B Body Mechanics and Fall Protection 1
APP 120B Confined Space Awareness 2
APP 121B Line and Grade 4
APP 122B Oxyfuel Gas Cutting 4
APP 123B Blueprint Reading for Laborers 3
APP 128B Asphalt 2
APP 130B Hazardous Waste Handling for Laborers 4
APP 132B Radiation 1
APP 134B Lead Abatement 2
APP 136B Asbestos Abatement 2
APP 139B Pipe Laying (Pressurized) 2
APP 140B Scaffold Building 2
APP 142B Forklift Operations and Awareness 1
APP 144B Operation of Motor Driven Power Equipment 1
APP 146B Operation of Concrete Core Drilling, Saw Cutting and Compaction Equipment 1
APP 150B Mason Tending (Trowel) 2
APP 152B Plaster Tending (Mixing) 2
APP 160B Miners Preparedness and Awareness 4
APP 162B Drilling and Blasting 4
APP 164B Pneumatic Air Tool Handling 2
APP 166B Mine Rescue 1
APP 168B Microbial Remediation 1
APP 200B OSHA for Laborers 2
APP 212B Foreman Preparedness 2
APP 263B Weatherization Installation Technician 5
APP 266B Weatherization Supervisor 3
APP 269B Weatherization Energy Auditor 3

Computation included in APP 104B, 105B, 107B, 120B, 121B
Human Relations included in APP 102B, 212B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any APP journeyman course offered for credit may be substituted for any of the above APP apprentice course. Contact the program coordinator for details. Special consideration will be given students who complete the Laborer Trades’ Certificate of Achievement if they are affected by the retroactive six year rule.
## Equipment Operators
### ASSOCIATE OF APPLIED SCIENCE (AAS)

### REQUIRED CREDITS: 60

**DEGREE CODE:** OPEEQP-AAS

### PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Operating Engineer with the Operating Engineers Union. **This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills emphasizing math, science and human relations are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

### STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable Operating Engineers’ tools.
- Comprehend and utilize formulas used in the calculations of all phases of Operating Engineers’ work.
- Demonstrate the ability to troubleshoot and repair any problems that arise in Operating Engineers’ work.

### PLEASE NOTE
- The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

### GENERAL EDUCATION REQUIREMENTS (25 CREDITS)

<table>
<thead>
<tr>
<th>Category</th>
<th>Course(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MATHEMATICS (3 credits)</strong></td>
<td>MATH 116</td>
</tr>
<tr>
<td><strong>ENGLISH COMPOSITION (3 credits)</strong></td>
<td>ENG 101 or 102 or 107</td>
</tr>
<tr>
<td><strong>COMMUNICATIONS (3 credits)</strong></td>
<td>COM 101 or 215; or ENG 101</td>
</tr>
<tr>
<td><strong>HUMAN RELATIONS (3 credits)</strong></td>
<td>ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B</td>
</tr>
<tr>
<td><strong>NATURAL SCIENCE (6 credits)</strong></td>
<td>AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110</td>
</tr>
<tr>
<td><strong>FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)</strong></td>
<td>ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101</td>
</tr>
<tr>
<td><strong>U.S. AND NEVADA CONSTITUTIONS (4-6 credits)</strong></td>
<td>PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217</td>
</tr>
</tbody>
</table>

### SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

<table>
<thead>
<tr>
<th>Category</th>
<th>Course(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CORE REQUIREMENTS (30 credits)</strong></td>
<td>OPE 101B Introduction to Apprenticeship/Operation and Maintenance 5</td>
</tr>
<tr>
<td></td>
<td>OPE 153B Grade Checking I 5</td>
</tr>
<tr>
<td></td>
<td>OPE 155B Plan Reading/Grade Checking II 5</td>
</tr>
<tr>
<td></td>
<td>OPE 157B Specialized Equipment 5</td>
</tr>
<tr>
<td></td>
<td>OPE 159B Cranes 5</td>
</tr>
<tr>
<td></td>
<td>OPE 201B Hazardous Materials Handling Awareness 5</td>
</tr>
<tr>
<td><strong>CHOOSE ELECTIVES (5 credits)</strong></td>
<td>OPE 108B Hydraulics 5</td>
</tr>
<tr>
<td></td>
<td>OPE 212B Welding 5</td>
</tr>
<tr>
<td></td>
<td>OPE 214B Heavy Equipment Repair 5</td>
</tr>
<tr>
<td></td>
<td>or OPE (any) journeyman classes offered for college credit (credit may vary).</td>
</tr>
</tbody>
</table>

### NOTE
- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please contact the program coordinator for more details.
- Special consideration will be given students who complete the Operating Engineers Associate of Applied Science if they are affected by the retroactive six year rule.
Equipment Operators
CERTIFICATE OF ACHIEVEMENT (CA)

REQUIRED CREDITS: 30
DEGREE CODE: OPEEQP-CT

PROGRAM DESCRIPTION
This program prepares students for employment as a Journeyman Operating Engineer with the Operating Engineers Union. This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable Operating Engineers’ tools.
• Comprehend and utilize formulas used in the calculations of all phases of Operating Engineers’ work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in Operating Engineers’ work.

PLEASE NOTE • The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)
COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)
OPE 101B Introduction to Apprenticeship/Operation and Maintenance 5
OPE 153B Grade Checking I 5
OPE 155B Plan Reading/Grade Checking II 5
OPE 157B Specialized Equipment 5
OPE 159B Cranes 5
OPE 270B OSHA 30 2

Computation included in OPE 153B, 155B
Human Relations included in OPE 101B

NOTE
• Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement. Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please see the program coordinator for details. Special consideration will be given students who complete the Equipment Operators Certificate of Achievement if they are affected by the retroactive six year rule.
Floor Coverer
ASSOCIATE OF APPLIED SCIENCE (AAS)

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Floor Coverer with the Floor Coverers Union.

This is a restricted entry program. Students MUST be indentured in the Floor Coverers Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing related math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable floor covering tools.
• Comprehend and utilize formulas used in the calculations of all phases of floor covering work.
• Demonstrate the ability to troubleshoot and repair any problems that arise with floor covering Installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (33 CREDITS)

<table>
<thead>
<tr>
<th>MATHEMATICS (3 credits)</th>
<th>FLCV 100B Introduction to the Union and Construction Trade</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 116</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENGLISH COMPOSITION (3 credits)</th>
<th>FLCV 111B Introduction to the Flooring Trade</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 or 102 or 107</td>
<td>FLCV 121B Floor Installation Process</td>
<td>5</td>
</tr>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td>FLCV 131B Carpet Installation Process</td>
<td>5</td>
</tr>
<tr>
<td>COMPUTING (3 credits)</td>
<td>FLCV 141B Special Floors and Finishes</td>
<td>3</td>
</tr>
<tr>
<td>IS 101</td>
<td>FLCV 200B Math for Floor Coverers</td>
<td>2</td>
</tr>
<tr>
<td>HUMAN RELATIONS (3 credits)</td>
<td>FLCV 211B Drawings (Blueprints) for Floor Coverers</td>
<td>2</td>
</tr>
<tr>
<td>ALS 101; ANTH 101, 112; HIST 105; HPS 130; MGT 100B; SOC 101</td>
<td>FLCV 221B Safety Awareness</td>
<td>4</td>
</tr>
<tr>
<td>NATURAL SCIENCE (8 credits)</td>
<td>FLCV 231B Leadership</td>
<td>2</td>
</tr>
<tr>
<td>AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| FINE ARTS/HUMANITIES/SOCIAL SCIENCE (6 credits) |                                           |   |
| ANTH 101; ART 101, 102, 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101 |                                           |   |

| U.S. AND NEVADA CONSTITUTIONS (4-6 credits) |                                           |   |
| PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217 |                                           |   |

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

| FLCV 100B Introduction to the Union and Construction Trade | 1 |
| FLCV 111B Introduction to the Flooring Trade | 3 |
| FLCV 121B Floor Installation Process | 5 |
| FLCV 131B Carpet Installation Process | 5 |
| FLCV 141B Special Floors and Finishes | 3 |
| FLCV 200B Math for Floor Coverers | 2 |
| FLCV 211B Drawings (Blueprints) for Floor Coverers | 2 |
| FLCV 221B Safety Awareness | 4 |
| FLCV 231B Leadership | 2 |

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any FLCV journeyman course offered for credit may be substituted for any of the above FLCV apprentice courses. Please contact the program coordinator for more details.
Special consideration will be given students who complete the Floor Coverers Associate of Applied Science Degree if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This program prepares students for employment as a Journeyman Floor Coverer with the Floor Coverers Union. This is a restricted entry program. Students MUST be indentured in the Floor Coverers Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable floor coverer tools.
• Comprehend and utilize formulas used in the calculations of all phases of floor covering work.
• Comprehend the ability to troubleshoot and repair any problems that arise with floor covering Installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

FLCV 100B Introduction to the Union and Construction Trade 1
FLCV 111B Introduction to the Flooring Trade 3
FLCV 121B Floor Installation Process 5
FLCV 131B Carpet Installation Process 5
FLCV 141B Special Floors and Finishes 3
FLCV 200B Math for Floor Coverers 2
FLCV 211B Drawings (Blueprints) for Floor Coverers 2
FLCV 221B Safety Awareness 4
FLCV 231B Leadership 2

Computation included in FLCV 200B, 221B
Human Relations included in FLCV 231B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any FLCV journeyman course offered for credit may be substituted for any of the above FLCV apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Floor Coverers Certificate of Achievement if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This degree prepares the students for employment as a General Construction Inspector with the Operating Engineers Union. **This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills emphasizing math, science, and human relations are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable Operating Engineers’ tools.
- Comprehend and utilize formulas used in the calculations of all phases of Operating Engineers’ work.
- Demonstrate the ability to troubleshoot and repair any problems that arise in Operating Engineers’ work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (25 CREDITS)

**MATHEMATICS (3 credits)**
MATH 116

**ENGLISH COMPOSITION (3 credits)**
ENG 101 or 102 or 107

**COMMUNICATIONS (3 credits)**
COM 101 or 215; or ENG 101

**HUMAN RELATIONS (3 credits)**
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B

**NATURAL SCIENCE (6 credits)**
AST 101; BIOL 101; CHEM 103; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

**FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)**
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

**U.S. AND NEVADA CONSTITUTIONS (4-6 credits)**
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

**CORE REQUIREMENTS (25 credits)**
- OPE 201B Hazardous Materials Handling Awareness 5
- OPE 202B Soils Inspection and Testing 5
- OPE 204B Reinforced Concrete Inspector 5
- OPE 206B Pre-Stressed Concrete Inspector 5
- OPE 208B Structural Masonry Inspector 5

**CHOOSE ELECTIVES (10 credits)**
- OPE 209B General Construction Inspector 5
- OPE 211B Spray Applied Fire Proofing Inspector 5
- OPE 213B Structural Steel and Bolting Inspector 5

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please contact the program coordinator for more details.
  Special consideration will be given students who complete the Operating Engineers Associate of Applied Science Degree if they are affected by the retroactive six year rule.
General Construction Inspector
CERTIFICATE OF ACHIEVEMENT (CA)

PROGRAM DESCRIPTION
This program prepares students for employment as a General Construction Inspector with the Operating Engineers Union. **This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable building codes and inspection requirements.
- Comprehend and utilize formulas used in the calculations of all phases of construction inspection.
- Demonstrate the ability to troubleshoot and report any problems that arise in during a structural inspection.

**PLEASE NOTE** - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

<table>
<thead>
<tr>
<th>GENERAL EDUCATION REQUIREMENTS (3 CREDITS)</th>
<th>SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNICATIONS (3 credits)</td>
<td>OPE 201B Hazardous Materials Handling Awareness 5</td>
</tr>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td>OPE 202B Soils Inspection and Testing 5</td>
</tr>
<tr>
<td></td>
<td>OPE 204B Reinforced Concrete Inspector 5</td>
</tr>
<tr>
<td></td>
<td>OPE 206B Pre-Stressed Concrete Inspector 5</td>
</tr>
<tr>
<td></td>
<td>OPE 208B Structural Masonry Inspector 5</td>
</tr>
<tr>
<td></td>
<td>OPE 270B OSHA 30 2</td>
</tr>
<tr>
<td></td>
<td>Computation included in OPE 202B, 204B, 206B, 208B</td>
</tr>
<tr>
<td></td>
<td>Human Relations included in OPE 202B, 204B, 206B, 208B</td>
</tr>
</tbody>
</table>

**NOTE**
- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please see the program coordinator for details. Special consideration will be given students who complete the Operating Engineers Certificate of Achievement if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Glazier with the Glaziers Union. **This is a restricted entry program. Students MUST be indentured in the Glaziers Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills, emphasizing related math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable glazing tools and equipment.
• Comprehend and utilize formulas used in the calculations of all phases of glazing work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in glazing installations.

PLEASE NOTE • The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (27 CREDITS)

<table>
<thead>
<tr>
<th>uliacl0y (3 credits)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MATHMATICS (3 credits)</strong></td>
<td>MATH 116</td>
<td>GLZR 111B Glazier I</td>
</tr>
<tr>
<td><strong>ENGLISH COMPOSITION (3 credits)</strong></td>
<td>ENG 101 or 107</td>
<td>GLZR 112B Glazier II</td>
</tr>
<tr>
<td><strong>COMMUNICATIONS (3 credits)</strong></td>
<td>COM 101 or 215; or ENG 101</td>
<td>GLZR 121B Glazier III</td>
</tr>
<tr>
<td><strong>HUMAN RELATIONS (3 credits)</strong></td>
<td>ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B</td>
<td>GLZR 122B Glazier IV</td>
</tr>
<tr>
<td><strong>NATURAL SCIENCE (8 credits)</strong></td>
<td>AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110</td>
<td>GLZR 131B Glazier V</td>
</tr>
<tr>
<td><strong>FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)</strong></td>
<td>ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101</td>
<td>GLZR 132B Glazier VI</td>
</tr>
<tr>
<td><strong>U.S. AND NEVADA CONSTITUTIONS (4-6 credits)</strong></td>
<td>PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217</td>
<td>GLZR 141B Glazier VII</td>
</tr>
</tbody>
</table>

SPECIAL PROGRAM REQUIREMENTS (33 CREDITS)

<table>
<thead>
<tr>
<th>cl0y (5 credits)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GLZR 111B Glazier I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GLZR 112B Glazier II</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GLZR 121B Glazier III</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GLZR 122B Glazier IV</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GLZR 131B Glazier V</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GLZR 132B Glazier VI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GLZR 141B Glazier VII</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GLZR 142B Glazier VIII</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any GLZR journeyman course offered for credit may be substituted for any of the above GLZR apprentice courses. Please contact the program coordinator for more details.

Special consideration will be given students who complete the Glaziers Associate of Applied Science Degree if they are affected by the retroactive six year rule.
## Glazier

**CERTIFICATE OF ACHIEVEMENT (CA)**

**PROGRAM DESCRIPTION**

This program prepares students for employment as a Journeyman Glazier with the Glaziers Union. **This is a restricted entry program. Students MUST be indentured in the Glaziers Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

**STUDENT LEARNING OUTCOMES**

- Comprehend and utilize all applicable glazier tools and equipment.
- Comprehend and utilize formulas used in the calculations of all phases of glazier work.
- Comprehend the ability to troubleshoot and repair any problems that arise in glazing installations.

**PLEASE NOTE** - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

### GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLZR 111B</td>
<td>Glazier I</td>
<td>5</td>
</tr>
<tr>
<td>GLZR 112B</td>
<td>Glazier II</td>
<td>3</td>
</tr>
<tr>
<td>GLZR 121B</td>
<td>Glazier III</td>
<td>4</td>
</tr>
<tr>
<td>GLZR 122B</td>
<td>Glazier IV</td>
<td>3</td>
</tr>
<tr>
<td>GLZR 131B</td>
<td>Glazier V</td>
<td>5</td>
</tr>
<tr>
<td>GLZR 132B</td>
<td>Glazier VI</td>
<td>5</td>
</tr>
<tr>
<td>GLZR 270B</td>
<td>OSHA 30</td>
<td>2</td>
</tr>
</tbody>
</table>

Computation included in GLZR 111B, 112B, 131B
Human Relations included in GLZR 132B

### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLZR 111B</td>
<td>Glazier I</td>
<td>5</td>
</tr>
<tr>
<td>GLZR 112B</td>
<td>Glazier II</td>
<td>3</td>
</tr>
<tr>
<td>GLZR 121B</td>
<td>Glazier III</td>
<td>4</td>
</tr>
<tr>
<td>GLZR 122B</td>
<td>Glazier IV</td>
<td>3</td>
</tr>
<tr>
<td>GLZR 131B</td>
<td>Glazier V</td>
<td>5</td>
</tr>
<tr>
<td>GLZR 132B</td>
<td>Glazier VI</td>
<td>5</td>
</tr>
<tr>
<td>GLZR 270B</td>
<td>OSHA 30</td>
<td>2</td>
</tr>
</tbody>
</table>

**NOTE**

- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit [www.csn.edu/honors](http://www.csn.edu/honors).
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any GLZR journeyman course offered for credit may be substituted for any of the above GLZR apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Glaziers Certificate of Achievement if they are affected by the retroactive six year rule.
Heat and Frost Insulator
ASSOCIATE OF APPLIED SCIENCE (AAS)

REQUIRED CREDITS: 60
DEGREE CODE: HTFRST-AAS

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman with the Heat and Frost Insulators Union. This is a restricted entry program. Students MUST be indentured in the Heat and Frost Insulators Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing related math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable heat and frost insulator tools.
• Comprehend and utilize formulas used in the calculations of all phases of heat and frost insulator work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in heat and frost insulation installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (25 CREDITS)

MATHEMATICS (3 credits)
MATH 116

ENGLISH COMPOSITION (3 credits)
ENG 101 or 102 or 107

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

HUMAN RELATIONS (3 credits)
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B

NATURAL SCIENCE (6 credits)
AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA CONSTITUTIONS (4-6 credits)
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

ASB 101B Asbestos Worker I 4
ASB 102B Asbestos Worker II 3
ASB 111B Asbestos Worker III 3
ASB 112B Asbestos Worker IV 5
ASB 120B Asbestos Worker V 4
ASB 121B Asbestos Worker VI 4
ASB 201B Asbestos Worker VII 6
ASB 202B Asbestos Worker VIII 6

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any ASB journeyman course offered for credit may be substituted for any of the above ASB apprentice courses. Please contact the program coordinator for more details.
Special consideration will be given students who complete the Heat and Frost Insulators’ Associate of Applied Science Degree if they are affected by the retroactive six year rule.
Heat and Frost Insulator
CERTIFICATE OF ACHIEVEMENT (CA)

PROGRAM DESCRIPTION
This program prepares students for employment as a Journeyman Insulator with the Heat and Frost Insulators Union. **This is a restricted entry program. Students MUST be indentured in the Heat and Frost Insulators Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable heat and frost insulator tools.
- Comprehend and utilize formulas used in the calculations of all phases of heat and frost insulator work.
- Comprehend the ability to troubleshoot and repair any problems that arise in heat and frost insulation installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNICATIONS (3 credits)</td>
<td></td>
</tr>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td></td>
</tr>
</tbody>
</table>

SPECIAL PROGRAM REQUIREMENTS (29 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASB 101B Asbestos Worker I</td>
<td>4</td>
</tr>
<tr>
<td>ASB 102B Asbestos Worker II</td>
<td>3</td>
</tr>
<tr>
<td>ASB 111B Asbestos Worker III</td>
<td>3</td>
</tr>
<tr>
<td>ASB 112B Asbestos Worker IV</td>
<td>5</td>
</tr>
<tr>
<td>ASB 120B Asbestos Worker V</td>
<td>4</td>
</tr>
<tr>
<td>ASB 121B Asbestos Worker VI</td>
<td>4</td>
</tr>
<tr>
<td>ASB 201B Asbestos Worker VII</td>
<td>6</td>
</tr>
</tbody>
</table>

Computation included in ASB 101B, 111B
Human Relations included in ASB 201B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any ASB journeyman course offered for credit may be substituted for any of the above ASB apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Heat and Frost Insulators’ Certificate of Achievement if they are affected by the retroactive six year rule.
Heavy Duty Repairman

ASSOCIATE OF APPLIED SCIENCE (AAS)

PROGRAM DESCRIPTION
This degree prepares the student for employment as a Journeymen Heavy Duty Repairman with the Operating Engineers Union. This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes. Along with special program courses, academic skill emphasizing related math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable heavy duty repairman tools.
• Comprehend and utilize formulas used in the calculations of all phases of heavy duty repair work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in heavy duty repair work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (25 CREDITS)

MATHEMATICS (3 credits)
MATH 116

ENGLISH COMPOSITION (3 credits)
ENG 101 or 102 or 107

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

HUMAN RELATIONS (3 credits)
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B

NATURAL SCIENCE (6 credits)
AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA CONSTITUTIONS (4-6 credits)
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

OPE 101B Introduction to Apprenticeship/Operation and Maintenance 5
OPE 108B Hydraulics 5
OPE 124B Blueprint Reading for Welders/Machinists 5
OPE 201B Hazardous Materials Handling Awareness 5
OPE 210B Diesel and High Compression Engines 5
OPE 212B Welding 5
OPE 214B Heavy Equipment Repair 5

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please contact the program coordinator for more details.
• Special consideration will be given students who complete the Operating Engineers Associate of Applied Science if they are affected by the retroactive six year rule.
Heavy Duty Repairman
CERTIFICATE OF ACHIEVEMENT (CA)

PROGRAM DESCRIPTION
This program prepares the student for employment as a Journeymen Heavy Duty Repairman with the Operating Engineers Union. This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable heavy duty repairman tools.
• Comprehend and utilize formulas used in the calculations of all phases of heavy duty repair work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in heavy duty repair work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)
COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)
OPE 101B Introduction to Apprenticeship/Operation and Maintenance 5
OPE 108B Hydraulics 5
OPE 124B Blueprint Reading for Welders/Machinists 5
OPE 201B Hazardous Materials Handling Awareness 5
OPE 210B Diesel and High Compression Engines 5
OPE 270B OSHA 30 2

Computation included in OPE 108B, 124B, 210B
Human Relations included in OPE 101B

NOTE - Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Operating Engineers Heavy Duty Repairman Certificate of Achievement if they are affected by the retroactive six year rule.
Inside Wireman
ASSOCIATE OF APPLIED SCIENCE (AAS)  
REQUIRED CREDITS: 60  DEGREE CODE: ELAPPR-AAS

PROGRAM DESCRIPTION
This degree prepares students to take the Journeyman Electricians Exam administered by the International Brotherhood of Electrical Workers. This is a restricted entry program. Students MUST be indentured in the IBEW Inside Wireman Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing related math, science and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable electrical tools.
- Comprehend and utilize formulas used in the calculations of all phases of electrical work.
- Install all necessary equipment to complete any electrical system.
- Demonstrate the ability to troubleshoot and repair any problems that arise in electrical systems.
- Successfully pass Journeyman Electrician’s exams administered by the IBEW and the Clark County Building Department.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (28 CREDITS)

<table>
<thead>
<tr>
<th>MATHEMATICS (4 credits)</th>
<th>SPECIAL PROGRAM REQUIREMENTS (32 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 121B</td>
<td>ELEC 111B Electrical Apprentice I</td>
</tr>
<tr>
<td></td>
<td>ELEC 112B Electrical Apprentice II</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION (3 credits)</td>
<td>ELEC 122B Electrical Apprentice IV</td>
</tr>
<tr>
<td>ENG 101 or 102 or 107</td>
<td>ELEC 131B Electrical Apprentice V</td>
</tr>
<tr>
<td>COMMUNICATIONS (3 credits)</td>
<td>ELEC 132B Electrical Apprentice VI</td>
</tr>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td>ELEC 141B Electrical Apprentice VII</td>
</tr>
<tr>
<td>HUMAN RELATIONS (4 credits)</td>
<td>ELEC 142B Electrical Apprentice VIII</td>
</tr>
<tr>
<td>ELEC 150B</td>
<td>ELEC 152B Electrical Apprentice X</td>
</tr>
</tbody>
</table>

NATURAL SCIENCE (7 credits)
AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOI 100; PHYS 110

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA constitutions (4-6 credits)
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Special consideration will be given students who complete the Trade Union Electrical Apprentice Associate of Applied Science Degree if they are affected by the retroactive six year rule.
Program Description
This program prepares students to take the Journeyman Electrician Exam administered by the International Brotherhood of Electrical Workers. This is a restricted entry program. Students MUST be indentured in the IBEW Inside Wireman Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

Student Learning Outcomes
• Comprehend and utilize all applicable electrical tools.
• Comprehend and utilize formulas used in the calculations of all phases of electrical work.
• Install all necessary equipment to complete any electrical system.
• Demonstrate the ability to troubleshoot and repair any problems that arise in electrical systems.
• Successfully pass Journeyman Electrician’s exams administered by the IBEW and the Clark County Building Department.

Please Note - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

General Education Requirements (3 Credits)

Communications (3 credits)
COM 101 or 215; or ENG 101

Special Program Requirements (27 Credits)

ELEC 111B Electrical Apprentice I 4
ELEC 112B Electrical Apprentice II 4
ELEC 121B Electrical Apprentice III 4
ELEC 122B Electrical Apprentice IV 4
ELEC 127B Mobile Equipment Safety 1
ELEC 131B Electrical Apprentice V 4
ELEC 132B Electrical Apprentice VI 4
ELEC 137B OSHA 30 2

Computation included in ELEC 111B, 112B, 121B
Human Relations included in ELEC 112B, 121B

Note • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Special consideration will be given students who complete the Trade Union Inside Wireman Certificate of Achievement if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This program prepares students for employment as an Installer/Technician with the International Brotherhood of Electrical Workers. **This is a restricted entry program.** Students MUST be indentured in the IBEW Installer/Technician Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable electrical tools.
- Comprehend and utilize formulas used in the calculations of all phases of electrical work.
- Install all necessary equipment to complete any electrical system.
- Comprehend the ability to troubleshoot and repair any problems that arise in electrical systems.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)
COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)
- ELEC 127B Mobile Equipment Safety 1
- ELEC 137B OSHA 30 2
- ELEC 161B Installer/Technician Apprentice I 4
- ELEC 162B Installer/Technician Apprentice II 4
- ELEC 163B Installer/Technician Apprentice III 4
- ELEC 164B Installer/Technician Apprentice IV 4
- ELEC 165B Installer/Technician Apprentice V 4
- ELEC 166B Installer/Technician Apprentice VI 4

Computation included in ELEC 161B, 162B
Human Relations included in ELEC 161B, 162B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Special consideration will be given students who complete the Trade Union Installer/Technician Certificate of Achievement if they are affected by the retroactive six year rule.
SESSIONAL REQUIREMENTS (27 CREDITS)

**ELEC 127B**
Mobile Equipment Safety

**ELEC 137B**
OSHA 30

**ELEC 171B**
Sign Apprentice I

**ELEC 172B**
Sign Apprentice II

**ELEC 173B**
Sign Apprentice III

**ELEC 174B**
Sign Apprentice IV

**ELEC 175B**
Sign Apprentice V

**ELEC 176B**
Sign Apprentice VI

Computation included in ELEC 172B, 174B, 176B

Human Relations included in ELEC 171B, 176B

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

**COMMUNICATIONS (3 credits)**
COM 101 or 215; or ENG 101

**APPRENTICESHIP STUDIES**

**CERTIFICATE OF ACHIEVEMENT (CA)**

REQUIRED CREDITS: 30

DEGREE CODE: ELSIGN-CT

PROGRAM DESCRIPTION
This program prepares students for employment as a Sign Electrician with the International Brotherhood of Electrical Workers. This is a restricted entry program. Students MUST be indentured in the IBEW Sign Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES

- Comprehend and utilize all applicable electrical tools.
- Comprehend and utilize formulas used in the calculations of all phases of electrical work.
- Install all necessary equipment to complete any electrical system.
- Demonstrate the ability to troubleshoot and repair any problems that arise in electrical systems.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.

- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.

- In no case may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.

- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.

- Special consideration will be given students who complete the Trade Union Sign Certificate of Achievement if they are affected by the retroactive six year rule.
Machinist
ASSOCIATE OF APPLIED SCIENCE (AAS) REQUIRED CREDITS: 60 DEGREE CODE: OPEMACHAAS

PROGRAM DESCRIPTION
This degree prepares students for employment as a Machinist with the Operating Engineers Union. This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing math, science and human relations are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable machinists’ tools.
• Comprehend and utilize formulas used in the calculations of all phases of machinists’ work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in machinists’ work.

PLEASE NOTE  • The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (30 CREDITS)  SPECIAL PROGRAM REQUIREMENTS (30 CREDITS)

MATHMATICS (5 credits) OPE 105B Machine Tools I
OPE 116B 5

ENGLISH COMPOSITION (3 credits) OPE 110B Technical Sketching
ENG 101 or 102 or 107 5

COMMUNICATIONS (3 credits) OPE 124B Blueprint Reading for Welders/Machinists
COM 101 or 215; or ENG 101 5

HUMAN RELATIONS (5 credits) OPE 131B Introduction to Computer Aided Drafting
OPE 101B 5

NATURAL SCIENCE (5 credits) OPE 201B Hazardous Materials Handling Awareness
OPE 260B 5

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits) OPE 212B Welding
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA CONSTITUTIONS (6 credits) 5
HIST 101 and HIST 102; or HIST 101 and HIST 217

NOTE  • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please contact the program coordinator for more details. Special consideration will be given students who complete the Operating Engineers Associate of Applied Science if they are affected by the retroactive six year rule.
### Machinist

**CERTIFICATE OF ACHIEVEMENT (CA)**

**REQUIRED CREDITS: 30**

**DEGREE CODE: OPEMACH-CT**

#### PROGRAM DESCRIPTION

This degree prepares students for employment as a Machinist with the Operating Engineers Union. **This is a restricted entry program. Students MUST be indentured in** the Operating Engineers Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

#### STUDENT LEARNING OUTCOMES

- Comprehend and utilize all applicable machinists’ tools.
- Comprehend and utilize formulas used in the calculations of all phases of machinists’ work.
- Demonstrate the ability to troubleshoot and repair any problems that arise in machinists’ work.

#### PLEASE NOTE

- The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

#### GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

**COMMUNICATIONS (3 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td></td>
</tr>
</tbody>
</table>

#### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPE 101B</td>
<td>Introduction to Apprenticeship/Operation and Maintenance</td>
</tr>
<tr>
<td>OPE 105B</td>
<td>Machine Tools I</td>
</tr>
<tr>
<td>OPE 116B</td>
<td>Machinists/Surveyors Math</td>
</tr>
<tr>
<td>OPE 124B</td>
<td>Blueprint Reading for Welders/Machinists</td>
</tr>
<tr>
<td>OPE 131B</td>
<td>Introduction to Computer Aided Drafting</td>
</tr>
<tr>
<td>OPE 270B</td>
<td>OSHA 30</td>
</tr>
</tbody>
</table>

Computation included in OPE 116B

Human Relations included in OPE 101B

---

**NOTE**

- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please see the program coordinator for details.

Special consideration will be given students who complete the Operating Engineers Certificate of Achievement if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This degree prepares the students for employment as a Journeyman Millwright with the Carpenters Union. This is a restricted entry program. Students MUST be indentured in the Carpenters Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing math, science, and human relations are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable millwright tools.
• Comprehend and utilize formulas used in the calculation of all phases of millwright work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in millwright work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (25 CREDITS)

MATHEMATICS (3 credits)
MATH 116

ENGLISH COMPOSITION (3 credits)
ENG 101 or 102 or 107

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

HUMAN RELATIONS (3 credits)
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B

NATURAL SCIENCE (6-7 credits)
AST 101; BIOL 101; CHEM 103; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA CONSTITUTIONS (4-6 credits)
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (32 CREDITS)

CORE REQUIREMENTS (32 credits)
CPT 102B Orientation 2
CPT 104B Safety and Health Certifications 2
CPT 107B Print Reading 2

CORE REQUIREMENTS CONTINUED
CPT 137B Rigging 2
MWA 105B Millwright General Skills A 1.5
MWA 107B Millwright General Skills B 1.5
MWA 109B Cutting and Burning 1.5
MWA 111B Welding Fabrication A 1.5
MWA 113B Optics and Machinery Alignment 1.5
MWA 115B Machinery Shaft Alignment 1.5
MWA 117B Structural Welding - AWS A 1.5
MWA 119B Structural Welding - AWS B 1.5
MWA 121B Turbine Familiarization 1.5
MWA 125B Pumps 1.5
MWA 127B Turbine Maintenance 1.5
MWA 129B Conveyor Systems 1.5
MWA 131B Drives, Pulleys and Belts 1.5
MWA 133B Compressor Theory and Maintenance 1.5
MWA 135B Machinery Installation and Erection A 1.5
MWA 137B Machinery Installation and Erection B 1.5

CHOOSE ELECTIVES (4 credits)
CPT 115B Transit Level/Laser 2
CPT 129B Advanced Print Reading 2
CPT 145B Scaffold Erector Qualification 2
DWA 131B Light Gage Welding - AWS 2

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any MWA journeyman course offered for credit may be substituted for any of the above MWA apprentice courses. Please contact the program coordinator for more details.
• Special consideration will be given students who complete the Millwright Associate of Applied Science Degree if they are affected by the retroactive six year rule.
Millwright
CERTIFICATE OF ACHIEVEMENT (CA)

REQUIRED CREDITS: **30.5**
DEGREE CODE: **MWA-CT**

**PROGRAM DESCRIPTION**
This program prepares students for employment as a Journeyman Millwright with the Carpenters Union. **This is a restricted entry program. Students MUST be indentured in the Carpenters Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills emphasizing related math, science, and human relations components are stressed to prepare students to meet the challenges common in the workplace. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

**STUDENT LEARNING OUTCOMES**
- Comprehend and utilize all applicable millwright tools.
- Comprehend and utilize formulas used in the calculations of all phases of millwright work.
- Demonstrate the ability to troubleshoot and repair any problems that arise with millwright work.

**PLEASE NOTE** - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

**GENERAL EDUCATION REQUIREMENTS (3 CREDITS)**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td>Communications</td>
<td></td>
</tr>
</tbody>
</table>

**SPECIAL PROGRAM REQUIREMENTS (27.5 CREDITS)**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPT 102B</td>
<td>Orientation</td>
<td>2</td>
</tr>
<tr>
<td>CPT 104B</td>
<td>Safety and Health Certifications</td>
<td>2</td>
</tr>
<tr>
<td>CPT 107B</td>
<td>Print Reading</td>
<td>2</td>
</tr>
<tr>
<td>CPT 137B</td>
<td>Rigging</td>
<td>2</td>
</tr>
<tr>
<td>MWA 105B</td>
<td>Millwright General Skills A</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 107B</td>
<td>Millwright General Skills B</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 109B</td>
<td>Cutting and Burning</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 111B</td>
<td>Welding Fabrication A</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 113B</td>
<td>Optics and Machinery Alignment</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 115B</td>
<td>Machinery Shaft Alignment</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 117B</td>
<td>Structural Welding - AWS A</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 119B</td>
<td>Structural Welding - AWS B</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 121B</td>
<td>Turbine Familiarization</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 125B</td>
<td>Pumps</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 127B</td>
<td>Turbine Maintenance</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 129B</td>
<td>Conveyor Systems</td>
<td>1.5</td>
</tr>
<tr>
<td>MWA 131B</td>
<td>Drives, Pulleys and Belts</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Computation included in MWA 105B, 107B
Human Relations included in CPT 102B

**NOTE**
- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any MWA journeyman course offered for credit may be substituted for any of the above MWA apprentice courses. Please contact the program coordinator for details.
  Special consideration will be given students who complete the Millwright Certificate of Achievement if they are affected by the retroactive six year rule.
Oil Well Drillers
ASSOCIATE OF APPLIED SCIENCE (AAS)

REQUIRED CREDITS: 60
DEGREE CODE: OPEOIL-AAS

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Oil Well Driller with the Operating Engineers Union. **This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills emphasizing math, science and human relations are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable oil well drilling tools.
- Comprehend and utilize formulas used in the calculations of all phases of oil well drilling work.
- Demonstrate the ability to troubleshoot and repair any problems that arise in oil well drilling work.

PLEASE NOTE • The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (30 CREDITS)

**MATHEMATICS (3 credits)**
MATH 116

**ENGLISH COMPOSITION (3 credits)**
ENG 101 or 102 or 107

**COMMUNICATIONS (3 credits)**
COM 101 or 215; or ENG 101

**COMPUTING (1 credit)**

**HUMAN RELATIONS (3 credits)**
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B

**NATURAL SCIENCE (8 credits)**
AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

**FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)**
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

**U.S. AND NEVADA CONSTITUTIONS (6 credits)**
HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (30 CREDITS)

**CORE REQUIREMENTS (25 credits)**
OPE 101B  Introduction to Apprenticeship/Operation and Maintenance  5
OPE 173B  Drilling I  5
OPE 175B  Drilling II  5
OPE 177B  Drilling III  5
OPE 201B  Hazardous Materials Handling Awareness  5

**CHOOSE ELECTIVES (5 credits)**
OPE 157B  Specialized Equipment  5
OPE 212B  Welding  5
OPE 214B  Heavy Equipment Repair  5
OPE (any) journeyman classes offered for College credit (credit may vary).

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please contact the program coordinator for more details.
  Special consideration will be given students who complete the Operating Engineers Associate of Applied Science if they are affected by the retroactive six year rule.
Oil Well Drillers
CERTIFICATE OF ACHIEVEMENT (CA)

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Oil Well Driller with the Operating Engineers Union. **This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable oil well drilling tools.
- Comprehend and utilize formulas used in the calculations of all phases of oil well drilling work.
- Demonstrate the ability to troubleshoot and repair any problems that arise in oil well drilling work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

<table>
<thead>
<tr>
<th>GENERAL EDUCATION REQUIREMENTS (3 CREDITS)</th>
<th>SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td>OPE 101B Introduction to Apprenticeship/Operation and Maintenance 5</td>
</tr>
<tr>
<td></td>
<td>OPE 173B Drilling I 5</td>
</tr>
<tr>
<td></td>
<td>OPE 175B Drilling II 5</td>
</tr>
<tr>
<td></td>
<td>OPE 177B Drilling III 5</td>
</tr>
<tr>
<td></td>
<td>OPE 201B Hazardous Materials Handling Awareness 5</td>
</tr>
<tr>
<td></td>
<td>OPE 270B OSHA 30 2</td>
</tr>
</tbody>
</table>

Computation included in OPE 173B, 175B, 177B
Human Relations included in OPE 101B

**NOTE** • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please see the program coordinator for details. Special consideration will be given students who complete the Operating Engineers Certificate of Achievement if they are affected by the retroactive six year rule.
## Painter

**ASSOCIATE OF APPLIED SCIENCE (AAS)**

**REQUIRED CREDITS: 60**

**DEGREE CODE: PAINT-AAS**

### PROGRAM DESCRIPTION

This program prepares the student for employment as a Journeyman Painter with the Painters Union. **This is a restricted entry program. Students MUST be indentured in the Painters Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills emphasizing math, science, and human relations, components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

### STUDENT LEARNING OUTCOMES

- Comprehend and utilize all applicable painting tools.
- Comprehend and utilize formulas used in the calculations of all phases of painting work.
- Demonstrate the ability to troubleshoot and repair any problems that arise in painting installations.

**PLEASE NOTE** - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

### GENERAL EDUCATION REQUIREMENTS (30 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MATHEMATICS (3 credits)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 116</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>ENGLISH COMPOSITION (3 credits)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101 or 102 or 107</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>COMMUNICATIONS (3 credits)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>COMPUTING (3 credits)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS 101</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>HUMAN RELATIONS (3 credits)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>NATURAL SCIENCE (8 credits)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>U.S. AND NEVADA CONSTITUTIONS (4-6 credits)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSC 101, or HIST 101 and HIST 102, or HIST 101 and HIST 217</td>
<td>4-6</td>
<td></td>
</tr>
</tbody>
</table>

### SPECIAL PROGRAM REQUIREMENTS (30 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTD 101B Painting/Decorating Apprentice I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PTD 102B Painting/Decorating Apprentice IB</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PTD 105B OSHA/First Aid/CPR</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PTD 151B Painting/Decorating Apprentice II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PTD 152B Painting/Decorating Apprentice III</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PTD 155B Respirators/Lead Abatement</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PTD 201B Painting/Decorating Apprentice III</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PTD 202B Painting/Decorating Apprentice III</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PTD 205B Heavy Equipment Operation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PTD 255B COMET</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PTD 270B OSHA 30</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

### NOTE

- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any PTD journeyman course offered for credit may be substituted for any of the above PTD apprentice courses. Please contact the program coordinator for more details.
- Special consideration will be given students who complete the Painting Trades Associate of Applied Science if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This program prepares the student for employment as a Journeyman Painter with the Painters Union. **This is a restricted entry program. Students MUST be indentured in the Painters Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable painters tools.
- Comprehend and utilize formulas used in the calculations of all phases of painting work.
- Demonstrate the ability to troubleshoot and repair any problems that arise in painting installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

<table>
<thead>
<tr>
<th>COMMUNICATIONS (3 credits)</th>
<th>SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td>PTD 101B Painting/Decorating Apprentice I 4</td>
</tr>
<tr>
<td></td>
<td>PTD 102B Painting/Decorating Apprentice IB 4</td>
</tr>
<tr>
<td></td>
<td>PTD 105B OSHA/First Aid/CPR 1</td>
</tr>
<tr>
<td></td>
<td>PTD 151B Painting/Decorating Apprentice II 4</td>
</tr>
<tr>
<td></td>
<td>PTD 152B Painting/Decorating Apprentice IIIB 4</td>
</tr>
<tr>
<td></td>
<td>PTD 155B Respirators/Lead Abatement 1</td>
</tr>
<tr>
<td></td>
<td>PTD 201B Painting/Decorating Apprentice III 4</td>
</tr>
<tr>
<td></td>
<td>PTD 202B Painting/Decorating Apprentice IIIB 4</td>
</tr>
<tr>
<td></td>
<td>PTD 205B Heavy Equipment Operation 1</td>
</tr>
<tr>
<td></td>
<td>Computation included in PTD 101B, 102B, 151B, 152B, 155B, 201B, 202B</td>
</tr>
<tr>
<td></td>
<td>Human Relations included in PTD 101B, 102B, 151B, 152B, 201B, 202B</td>
</tr>
</tbody>
</table>

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any PTD journeyman course offered for credit may be substituted for any of the above PTD apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Painting Trades Certificate of Achievement if they are affected by the retroactive six year rule.
**Pile Driver**  
**ASSOCIATE OF APPLIED SCIENCE (AAS)**

**REQUIRED CREDITS: 60**  
**DEGREE CODE: PDA-AAS**

### PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Pile Driver with the Carpenters Union. **This is a restricted entry program. Students MUST be indentured in the Carpenters Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills emphasizing related math, science and human relations components are stressed to prepare students to meet the challenges common in the workplace. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

### STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable pile driver tools.
- Comprehend and utilize formulas used in the calculations of all phases of pile driver work.
- Demonstrate the ability to troubleshoot and repair any problems that arise with pile driver work.

**PLEASE NOTE** - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

### GENERAL EDUCATION REQUIREMENTS (25 CREDITS)

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MATHEMATICS (3 credits)</strong></td>
<td>MATH 116</td>
</tr>
<tr>
<td><strong>ENGLISH COMPOSITION (3 credits)</strong></td>
<td>ENG 101 or 102 or 107</td>
</tr>
<tr>
<td><strong>COMMUNICATIONS (3 credits)</strong></td>
<td>COM 101 or 215; or ENG 101</td>
</tr>
<tr>
<td><strong>HUMAN RELATIONS (3 credits)</strong></td>
<td>ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B</td>
</tr>
<tr>
<td><strong>NATURAL SCIENCE (6-7 credits)</strong></td>
<td>AST 101; BIOL 101; CHEM 103; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110</td>
</tr>
<tr>
<td><strong>FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)</strong></td>
<td>ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101</td>
</tr>
<tr>
<td><strong>U.S. AND NEVADA CONSTITUTIONS (4-6 credits)</strong></td>
<td>PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217</td>
</tr>
</tbody>
</table>

### SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT 102B Orientation</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>CPT 104B Safety and Health Certifications</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>CPT 105B Basic Wall Framing</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>CPT 107B Print Reading</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>CPT 115B Transit Level/Laser</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>CPT 129B Advanced Print Reading</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>CPT 137B Rigging</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>CPT 145B Scaffold Erector Qualification</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>MWA 111B Welding Fabrications A</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>MWA 117B Structural Welding - AWS A</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>MWA 119B Structural Welding - AWS B</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>PDA 105B Piles and Hammers A</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>PDA 107B Piles and Hammers B</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>PDA 109B Pile Caps and Columns A</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>PDA 111B Pile Caps and Columns B</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>PDA 113B Falsework A</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>PDA 115B Falsework B</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>PDA 117B Abutments A</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>PDA 119B Abutments B</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>PDA 121B Bridge Deck Forms A</strong></td>
<td>1.5</td>
</tr>
<tr>
<td><strong>PDA 123B Bridge Deck Forms B</strong></td>
<td>1.5</td>
</tr>
</tbody>
</table>

**NOTE** - Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.

- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any PDA journeyman course offered for credit may be substituted for any of the above PDA apprentice courses. Please contact the program coordinator for more details.
  Special consideration will be given students who complete the Pile Driver Associate of Applied Science if they are affected by the retroactive six year rule.
Pile Driver
CERTIFICATE OF ACHIEVEMENT (CA)

PROGRAM DESCRIPTION
This program prepares students for employment as a Journeyman Pile Driver with the Carpenters Union. **This is a restricted entry program. Students MUST be indentured in the Carpenters Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable pile driver tools.
- Comprehend and utilize formulas used in the calculations of all phases of pile driver work.
- Demonstrate the ability to troubleshoot and repair any problems that arise with pile driver work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

### GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td>Communications</td>
</tr>
</tbody>
</table>

### SPECIAL PROGRAM REQUIREMENTS (28 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPT 102B</td>
<td>Orientation</td>
</tr>
<tr>
<td>CPT 104B</td>
<td>Safety and Health Certifications</td>
</tr>
<tr>
<td>CPT 107B</td>
<td>Print Reading</td>
</tr>
<tr>
<td>CPT 137B</td>
<td>Rigging</td>
</tr>
<tr>
<td>CPT 145B</td>
<td>Scaffold Erector Qualification</td>
</tr>
<tr>
<td>MWA 117B</td>
<td>Structural Welding - AWS A</td>
</tr>
<tr>
<td>MWA 119B</td>
<td>Structural Welding - AWS B</td>
</tr>
<tr>
<td>PDA 105B</td>
<td>Piles and Hammers A</td>
</tr>
<tr>
<td>PDA 107B</td>
<td>Piles and Hammers B</td>
</tr>
<tr>
<td>PDA 109B</td>
<td>Pile Caps and Columns A</td>
</tr>
<tr>
<td>PDA 111B</td>
<td>Pile Caps and Columns B</td>
</tr>
<tr>
<td>PDA 113B</td>
<td>Falsework A</td>
</tr>
<tr>
<td>PDA 115B</td>
<td>Falsework B</td>
</tr>
<tr>
<td>PDA 117B</td>
<td>Abutments A</td>
</tr>
<tr>
<td>PDA 119B</td>
<td>Abutments B</td>
</tr>
<tr>
<td>PDA 121B</td>
<td>Bridge Deck Forms A</td>
</tr>
<tr>
<td>PDA 123B</td>
<td>Bridge Deck Forms B</td>
</tr>
</tbody>
</table>

Computation included in CPT 137B

Human Relations included in CPT 102B, 104B

### NOTE
- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any PDA journeyman course offered for credit may be substituted for any of the above PDA apprentice courses. Please contact the program coordinator for details.
- Special consideration will be given students who complete the Pile Driver Certificate of Achievement if they are affected by the retroactive six year rule.

REQUIRED CREDITS: 31

DEGREE CODE: PDA-CT
PROGRAM DESCRIPTION
This degree prepares students to take the Journeyman Piping Trades exam administered by the United Association. This is a restricted entry program. Students MUST be indentured in the United Association Piping Trades Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable pipe trades tools.
• Comprehend and utilize formulas used in the calculations of all phases of the piping trades.
• Install all necessary equipment to complete any piping system.
• Demonstrate the ability to troubleshoot and repair any problems that arise in piping systems.
• Successfully pass Journeyman Pipe Trade exams administered by the United Association and the Clark County Building Department.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (28 CREDITS)

MATHEMATICS (4 credits)
PPF 102B

ENGLISH COMPOSITION (3 credits)
ENG 101 or 102 or 107

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

HUMAN RELATIONS (4 credits)
PPF 101B

NATURAL SCIENCE (7 credits)
AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA CONSTITUTIONS (4-6 credits)
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (32 CREDITS)

PPF 151B Second Year Plumbers and Pipefitters Apprentice I 4
PPF 152B Second Year Plumbers and Pipefitters Apprentice II 4
PPF 201B Third Year Plumbers and Pipefitters Apprentice I 4
PPF 202B Third Year Plumbers and Pipefitters Apprentice II 4
PPF 251B Fourth Year Plumbers and Pipefitters Apprentice I 4
PPF 252B Fourth Year Plumbers and Pipefitters Apprentice II 4
PPF 291B Fifth Year Plumbers and Pipefitters Apprentice I 4
PPF 292B Fifth Year Plumbers and Pipefitters Apprentice II 4

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any PPF journeyman course offered for credit may be substituted for any of the above PPF apprentice courses. Please contact the program coordinator for more details.
• Special consideration will be given students who complete the Piping Trades Associate of Applied Science if they are affected by the retroactive six year rule.
Piping Trades
CERTIFICATE OF ACHIEVEMENT (CA)

PROGRAM DESCRIPTION
This program prepares students to take the Journeyman Piping Trades exam administered by the United Association. This is a restricted entry program. Students MUST be indentured in the United Association Piping Trades Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable piping tools.
• Comprehend and utilize formulas used in the calculations of all phases of the piping trades.
• Install all necessary equipment to complete any piping system.
• Demonstrate the ability to troubleshoot and repair any problems that arise in piping systems.
• Successfully pass Journeyman Pipe Trade exams administered by the United Association and the Clark County Building Department.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)
COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)
PPF 101B First Year Plumbers and Pipefitters Apprentice I 4
PPF 102B First Year Plumbers and Pipefitters Apprentice II 4
PPF 116B Technical Math for Piping Trades 2
PPF 151B Second Year Plumbers and Pipefitters Apprentice I 4
PPF 152B Second Year Plumbers and Pipefitters Apprentice II 4
PPF 170B OSHA 10 0.5
PPF 201B Third Year Plumbers and Pipefitters Apprentice I 4
PPF 202B Third Year Plumbers and Pipefitters Apprentice II 4
PPF 240B First Aid/CPR 0.5

Computation included in PPF 101B, 102B, 116B
Human Relations included in PPF 101B, 102B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog.
  If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any PPF journeyman course offered for credit may be substituted for any of the above PPF apprentice courses. Please see the program coordinator for details.
  Special consideration will be given students who complete the Piping Trades Certificate of Achievement if they are affected by the retroactive six year rule.
### PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Plasterer with the Plasterers Union. **This is a restricted entry program. Students MUST be indentured in the Plasterers Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills emphasizing math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

### STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable plasterer tools.
- Comprehend and utilize formulas used in the calculations of all phases of plaster work.
- Demonstrate the ability to troubleshoot and repair any problems that arise with plastering installations.

### PLEASE NOTE
The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

### GENERAL EDUCATION REQUIREMENTS (30 CREDITS)

- **MATHEMATICS (3 credits)**
  - MATH 116

- **ENGLISH COMPOSITION (3 credits)**
  - ENG 101 or 102 or 107

- **COMMUNICATIONS (6 credits)**
  - COM 101 or 215; or ENG 101

- **HUMAN RELATIONS (3 credits)**
  - MGT 100B or PSY 101 or SOC 101

- **NATURAL SCIENCE (8 credits)**
  - EGG 131 and 132

- **FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)**
  - ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

- **U.S. AND NEVADA CONSTITUTIONS (4-6 credits)**
  - PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

### SPECIAL PROGRAM REQUIREMENTS (30 CREDITS)

- PLA 111B Plasterer Apprentice I 4
- PLA 112B Plasterer Apprentice IB 3
- PLA 141B Plasterer Apprentice II 3
- PLA 142B Plasterer Apprentice IIB 4
- PLA 201B Plasterer Apprentice III 3
- PLA 202B Plasterer Apprentice IIIB 4
- PLA 251B Plasterer Apprentice IV 3
- PLA 252B Plasterer Apprentice IVB 4
- PLCM 270B OSHA 30 2

**NOTE**
- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
  - Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  - For more information visit www.csn.edu/honors.
  - In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
  - Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
  - Any PLA, journeyman course offered for credit may be substituted for any of the above PLA apprentice courses. Please contact the program coordinator for more details.
  - Special consideration will be given students who complete the Plasterer Apprentice Associate of Applied Science Degree if they are affected by the retroactive six year rule.
Plasterer
CERTIFICATE OF ACHIEVEMENT (CA)
REQUIRED CREDITS: 31
DEGREE CODE: PLA-CT

PROGRAM DESCRIPTION
This program prepares students for employment as a Journeyman Plasterer with the Plasterers Union. This is a restricted entry program. Students MUST be indentured in the Plasterers Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable plasterer tools.
• Comprehend and utilize formulas used in the calculations of all phases of plastering work.
• Comprehend the ability to troubleshoot and repair any problems that arise in tile plastering installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS) | SPECIAL PROGRAM REQUIREMENTS (28 CREDITS)
--- | ---
COM 101 or 215; or ENG 101 | PLA 111B Plasterer Apprentice I 4
| PLA 112B Plasterer IB 3
| PLA 141B Plasterer II 3
| PLA 142B Plasterer IIB 4
| PLA 201B Plasterer Apprentice III 3
| PLA 202B Plasterer Apprentice IIB 4
| PLA 251B Plasterer Apprentice IV 3
| PLA 252B Plasterer Apprentice IVB 4

Computation included in PLA 141B, 142B
Human Relations included in PLA 111B, 112B, 142B, 201B, 202B, 251B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any PLA journeyman course offered for credit may be substituted for any of the above PLA apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Tile Setters Certificate of Achievement if they are affected by the retroactive six year rule.
Reinforcing Ironworker
ASSOCIATE OF APPLIED SCIENCE (AAS)

REQUIRED CREDITS: 61
DEGREE CODE: IRWIRN-AAS

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Reinforcing Ironworker with the Ironworkers Union. This is a restricted entry program. Students MUST be enrolled in the Reinforcing Ironworkers Apprenticeship Program before enrolling in classes. In addition to special program courses, academic skills emphasizing related math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4127.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable Reinforcing Ironworker tools.
• Comprehend and utilize formulas used in the calculations of all phases of Reinforcing Ironworker work.
• Comprehend the ability to troubleshoot and repair any problems that arise in reinforcing ironwork installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (27 CREDITS)

| MATHEMATICS (3 credits)       | MATH 116                  |
| ENGLISH COMPOSITION (3-5 credits) | ENG 100 or 101 or 107 or 113 |
| COMMUNICATIONS (3 credits)    | COM 101 or 215; or ENG 102 |
| HUMAN RELATIONS (3 credits)   | MGT 100B                  |
| NATURAL SCIENCE (8 credits)   | EGG 131 and 131L and 132 |
| FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits) | ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101 |
| U.S. AND NEVADA CONSTITUTIONS (4-6 credits) | PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217 |

| SPECIAL PROGRAM REQUIREMENTS (34 CREDITS) |
| IRW 110B Introduction to Ironworking       | 3 |
| IRW 112B Metal Buildings                    | 1 |
| IRW 113B Ironworker History/C.O.M.E.T.     | 3 |
| IRW 114B Mixed Base for Ironworkers        | 3 |
| IRW 116B Reinforcing Iron I                 | 3 |
| IRW 150B Rigging for Ironworkers            | 3 |
| IRW 152B Welding I for Ironworkers          | 2 |
| IRW 154B Reinforcing Iron II                | 3 |
| IRW 156B Welding II for Ironworkers         | 2 |
| IRW 202B Welding III for Ironworkers        | 2 |
| IRW 204B Detailing I for Reinforcing Iron   | 3 |
| IRW 206B Detailing II for Reinforcing Iron  | 3 |
| IRW 208B Foreman Training for Ironworkers   | 3 |

NOTE
- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
- For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any IRW journeyman course offered for credit may be substituted for any of the above IRW apprentice courses. Please contact the program coordinator for more details.
- Special consideration will be given students who complete the Trade Union Ironworker Apprentice Associate of Applied Science degree if they are affected by the retroactive six year rule.
## Reinforcing Ironworker

**CERTIFICATE OF ACHIEVEMENT (CA)**  
**REQUIRED CREDITS:** 34  
**DEGREE CODE:** IRWIRN-CT

### Program Description
This program prepares students for employment as a Journeyman Reinforcing Ironworker with the Ironworkers Union. **This is a restricted entry program. Students MUST be indentured in the Reinforcing Ironworkers Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

### Student Learning Outcomes
- Comprehend and utilize all applicable reinforcing iron tools.
- Comprehend and utilize formulas used in the calculations of all phases of reinforcing iron work.
- Comprehend the ability to troubleshoot and repair any problems that arise in reinforcing iron work installations.

### Please Note
- The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

### General Education Requirements (3-5 Credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101 or 215; or ENG 100 or 101 or 113</td>
<td>Communications</td>
<td>3-5</td>
</tr>
</tbody>
</table>

### Special Program Requirements (31 Credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRW 110B</td>
<td>Introduction to Ironworking</td>
<td>3</td>
</tr>
<tr>
<td>IRW 112B</td>
<td>Metal Buildings</td>
<td>1</td>
</tr>
<tr>
<td>IRW 114B</td>
<td>Mixed Base for Ironworkers</td>
<td>3</td>
</tr>
<tr>
<td>IRW 116B</td>
<td>Reinforcing Iron I</td>
<td>3</td>
</tr>
<tr>
<td>IRW 150B</td>
<td>Rigging for Ironworkers</td>
<td>3</td>
</tr>
<tr>
<td>IRW 152B</td>
<td>Welding I for Ironworkers</td>
<td>2</td>
</tr>
<tr>
<td>IRW 154B</td>
<td>Reinforcing Iron II</td>
<td>3</td>
</tr>
<tr>
<td>IRW 156B</td>
<td>Welding II for Ironworkers</td>
<td>2</td>
</tr>
<tr>
<td>IRW 202B</td>
<td>Welding III for Ironworkers</td>
<td>2</td>
</tr>
<tr>
<td>IRW 204B</td>
<td>Detailing I for Reinforcing Iron</td>
<td>3</td>
</tr>
<tr>
<td>IRW 206B</td>
<td>Detailing II for Reinforcing Iron</td>
<td>3</td>
</tr>
<tr>
<td>IRW 208B</td>
<td>Foreman Training for Ironworkers</td>
<td>3</td>
</tr>
</tbody>
</table>

Computation included in IRW 114B, 204B

Human Relations included in IRW 208B

**Note:**
- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any IRW journeyman course offered for credit may be substituted for any of the above IRW apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Reinforcing Ironworker Certificate of Achievement if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This program prepares students for employment as a Residential Electrician with the International Brotherhood of Electrical Workers. **This is a restricted entry program. Students MUST be indentured in the IBEW Residential Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable electrical tools.
- Comprehend and utilize formulas used in the calculations of all phases of electrical work.
- Install all necessary equipment to complete any electrical system.
- Demonstrate the ability to troubleshoot and repair any problems that arise in electrical systems.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)
COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)
ELEC 115B Residential Apprentice I 4
ELEC 116B Residential Apprentice II 4
ELEC 117B Residential Apprentice III 4
ELEC 118B Residential Apprentice IV 4
ELEC 119B Residential Apprentice V 4
ELEC 120B Residential Apprentice VI 4
ELEC 127B Mobile Equipment Safety 1
ELEC 137B OSHA 30 2

Computation included in ELEC 115B, 116B
Human Relations included in ELEC 115B, 120B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Special consideration will be given students who complete the Trade Union Residential Certificate of Achievement if they are affected by the retroactive six year rule.
Roofer and Waterproofer
ASSOCIATE OF APPLIED SCIENCE (AAS)

REQUIRED CREDITS: 60
DEGREE CODE: ROOF-AAS

PROGRAM DESCRIPTION
This program prepares the student for employment as a Journeyman Roofer and Water Proofer with the Roofers Union. **This is a restricted entry program. Students MUST be indentured in the Roofer and Water Proofer Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills emphasizing math, science and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable roofing tools.
• Comprehend and utilize formulas used in the calculations of all phases of roofing work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in roofing installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (28 CREDITS)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATHEMATICS (3 credits)</td>
<td></td>
</tr>
<tr>
<td>MATH 116</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION (3 credits)</td>
<td></td>
</tr>
<tr>
<td>ENG 101 or 102 or 107</td>
<td></td>
</tr>
<tr>
<td>COMMUNICATIONS (3 credits)</td>
<td></td>
</tr>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td></td>
</tr>
<tr>
<td>HUMAN RELATIONS (3 credits)</td>
<td></td>
</tr>
<tr>
<td>ALS 101; ANTH 101, 112; HIST 105; HIMS 103; MGT 100B; SOC 101</td>
<td></td>
</tr>
<tr>
<td>NATURAL SCIENCE (7 credits)</td>
<td></td>
</tr>
<tr>
<td>AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110</td>
<td></td>
</tr>
<tr>
<td>FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)</td>
<td></td>
</tr>
<tr>
<td>ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101</td>
<td></td>
</tr>
<tr>
<td>U.S. AND NEVADA CONSTITUTIONS (6 credits)</td>
<td></td>
</tr>
<tr>
<td>HIST 101 and HIST 102; or HIST 101 and HIST 217</td>
<td></td>
</tr>
</tbody>
</table>

SPECIAL PROGRAM REQUIREMENTS (32 CREDITS)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFR 101B Roofers Apprentice I</td>
<td>4</td>
</tr>
<tr>
<td>RFR 102B Roofers Apprentice I s</td>
<td>4</td>
</tr>
<tr>
<td>RFR 151B Roofers Apprentice II</td>
<td>4</td>
</tr>
<tr>
<td>RFR 152B Roofers Apprentice II s</td>
<td>4</td>
</tr>
<tr>
<td>RFR 201B Roofers Apprentice III</td>
<td>4</td>
</tr>
<tr>
<td>RFR 202B Roofers Apprentice III s</td>
<td>4</td>
</tr>
<tr>
<td>RFR 211B Safety</td>
<td>4</td>
</tr>
<tr>
<td>RFR 212B CPR, First Aid, and OSHA 10</td>
<td>4</td>
</tr>
</tbody>
</table>

NOTE
• Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any RFR journeyman course offered for credit may be substituted for any of the above RFR apprentice courses. Please contact the program coordinator for more details.
• Special consideration will be given students who complete the Roofers Associate of Applied Science if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This program prepares the student for employment as a Journeyman Roofer and Water Proofer with the Roofers Union. This is a restricted entry program. Students MUST be indentured in the Roofer and Water Proofer Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable roofing tools.
• Comprehend and utilize formulas used in the calculations of all phases of roofing work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in roofing installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

| COMMUNICATIONS (3 credits) | RFR 101B Roofer Apprentice I 4 |
| COM 101 or 215; or ENG 101 | RFR 102B Roofer Apprentice I s 4 |
| | RFR 151B Roofer Apprentice II 4 |
| | RFR 152B Roofer Apprentice II s 4 |
| | RFR 201B Roofer Apprentice III 4 |
| | RFR 211B Safety 4 |
| | RFR 212B CPR, First Aid and OSHA 10 4 |
| | Computation included in RFR 102B |
| | Human Relations included in RFR 101B |

SPECIAL PROGRAM REQUIREMENTS (28 CREDITS)

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any RFR journeyman course offered for credit may be substituted for any of the above RFR apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Roofers and Waterproofers Certificate of Achievement if they are affected by the retroactive six year rule.
**Program Description**

This degree prepares students for employment as a Journeyman Scaffold Erector with the Carpenters Union. **This is a restricted entry program. Students MUST be indentured in the Carpenters Apprenticeship Program before enrolling in classes.** Along with special program courses, academic skills emphasizing related math, science and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

**Student Learning Outcomes**

- Comprehend and utilize all applicable scaffold erector tools.
- Comprehend and utilize formulas used in the calculations of all phases of scaffold erector work.
- Demonstrate the ability to troubleshoot and repair any problems that arise with scaffold erector installations.

**Please Note** - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

## General Education Requirements (25 Credits)

<table>
<thead>
<tr>
<th>Category</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics (3 credits)</td>
<td>MATH 116</td>
</tr>
<tr>
<td>English Composition (3 credits)</td>
<td>ENG 101 or 102 or 107</td>
</tr>
<tr>
<td>Communications (3 credits)</td>
<td>COM 101 or 215; or ENG 101</td>
</tr>
<tr>
<td>Human Relations (3 credits)</td>
<td>ALS 101; ANTH 101; 112; HIST 105; HMS 130; MGT 100B</td>
</tr>
<tr>
<td>Natural Science (6-7 credits)</td>
<td>AST 101; BIOL 101; CHEM 103; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110</td>
</tr>
<tr>
<td>Fine Arts/Humanities/Social Science (3 credits)</td>
<td>ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101</td>
</tr>
<tr>
<td>U.S. and Nevada Constitutions (4-6 credits)</td>
<td>PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217</td>
</tr>
</tbody>
</table>

## Special Program Requirements (35 Credits)

<table>
<thead>
<tr>
<th>Category</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Requirements (27 credits)</td>
<td>CPT 102B Orientation 2</td>
</tr>
<tr>
<td></td>
<td>CPT 104B Safety and Health Certifications 2</td>
</tr>
<tr>
<td></td>
<td>CPT 107B Print Reading 2</td>
</tr>
<tr>
<td></td>
<td>CPT 129B Advanced Print Reading 2</td>
</tr>
<tr>
<td></td>
<td>SEA 105B Basic Frame Scaffold 1.5</td>
</tr>
<tr>
<td></td>
<td>SEA 109B Basic System Scaffold 1.5</td>
</tr>
<tr>
<td></td>
<td>SEA 111B Basic Suspended Scaffold 1.5</td>
</tr>
<tr>
<td></td>
<td>SEA 113B Basic Tube and Clamp Scaffold 1.5</td>
</tr>
<tr>
<td></td>
<td>SEA 115B Intermediate Frame Scaffold 1.5</td>
</tr>
<tr>
<td></td>
<td>SEA 117B Intermediate System Scaffold 1.5</td>
</tr>
<tr>
<td></td>
<td>SEA 119B Advanced Frame Scaffold 1.5</td>
</tr>
<tr>
<td></td>
<td>SEA 121B Advanced System Scaffold 1.5</td>
</tr>
<tr>
<td></td>
<td>SEA 123B Advanced Suspended Scaffold 1.5</td>
</tr>
<tr>
<td></td>
<td>SEA 125B Scaffold Re-Shoring 2</td>
</tr>
<tr>
<td></td>
<td>SEA 127B Scaffolding in Confined Spaces 1.5</td>
</tr>
<tr>
<td></td>
<td>SEA 129B Specialty Scaffolding Applications 2</td>
</tr>
</tbody>
</table>

| Choose Electives (8 credits)                       | CPT 105B Basic Wall Framing 1.5                                         |
|                                                    | CPT 111B Wall Forming 1.5                                               |
|                                                    | CPT 115B Transit Level/Laser 2                                            |
|                                                    | CPT 121B Stair and Ramp Forming 1.5                                      |
|                                                    | CPT 137B Rigging 2                                                       |
|                                                    | CPT 145B Scaffold Erector Qualification 2                                |

**Note**

- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any SEA journeyman course offered for credit may be substituted for any of the above SEA apprentice courses. Please contact the program coordinator for more details.
- Special consideration will be given students who complete the Scaffold Erector Associate of Applied Science if they are affected by the retroactive six year rule.
**PROGRAM DESCRIPTION**

This program prepares students for employment as a Journeyman Scaffold Erector with the Carpenters Union. **This is a restricted entry program. Students MUST be indentured in the Carpenters Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

**STUDENT LEARNING OUTCOMES**

- Comprehend and utilize all applicable scaffold erector tools.
- Comprehend and utilize formulas used in the calculations of all phases of scaffold erector work.
- Demonstrate the ability to troubleshoot and repair any problems that arise with scaffold installations.

**PLEASE NOTE** - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

### GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

**COMMUNICATIONS (3 credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPT 102B</td>
<td>Orientation</td>
<td>2</td>
</tr>
<tr>
<td>CPT 104B</td>
<td>Safety and Health Certifications</td>
<td>2</td>
</tr>
<tr>
<td>CPT 107B</td>
<td>Print Reading</td>
<td>2</td>
</tr>
<tr>
<td>CPT 129B</td>
<td>Advanced Print Reading</td>
<td>2</td>
</tr>
<tr>
<td>SEA 105B</td>
<td>Basic Frame Scaffold</td>
<td>1.5</td>
</tr>
<tr>
<td>SEA 109B</td>
<td>Basic System Scaffold</td>
<td>1.5</td>
</tr>
<tr>
<td>SEA 111B</td>
<td>Basic Suspended Scaffold</td>
<td>1.5</td>
</tr>
<tr>
<td>SEA 113B</td>
<td>Basic Tube and Clamp Scaffold</td>
<td>1.5</td>
</tr>
<tr>
<td>SEA 115B</td>
<td>Intermediate Frame Scaffold</td>
<td>1.5</td>
</tr>
<tr>
<td>SEA 117B</td>
<td>Intermediate System Scaffold</td>
<td>1.5</td>
</tr>
<tr>
<td>SEA 119B</td>
<td>Advanced Frame Scaffold</td>
<td>1.5</td>
</tr>
<tr>
<td>SEA 121B</td>
<td>Advanced System Scaffold</td>
<td>1.5</td>
</tr>
<tr>
<td>SEA 123B</td>
<td>Advanced Suspended Scaffold</td>
<td>1.5</td>
</tr>
<tr>
<td>SEA 125B</td>
<td>Scaffold Re-Shoring</td>
<td>2</td>
</tr>
<tr>
<td>SEA 127B</td>
<td>Scaffold in Confined Space</td>
<td>1.5</td>
</tr>
<tr>
<td>SEA 129B</td>
<td>Specialty Scaffold Applications</td>
<td>2</td>
</tr>
</tbody>
</table>

Computation included in SEA 105B, 113B, 115B, 119B

Human Relations included in CPT 102B, 104B

---

**NOTE**

- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  
  For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. **In no case may a student use a catalog which is more than six years old at the time of graduation.**
- Any SEA journeyman course offered for credit may be substituted for any of the above SEA apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Scaffold Erector Certificate of Achievement if they are affected by the retroactive six year rule.
# Program Description

This degree prepares the student for employment as a Journeyman Sheet Metal Worker with the Sheet Metal Union. This is a restricted entry program. Students MUST be indentured in the Sheet Metal Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing related math, science, and human relations are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

## Student Learning Outcomes

- Comprehend and utilize all applicable sheet metal tools.
- Comprehend and utilize formulas used in the calculations of all phases of sheet metal installations.
- Demonstrate the ability to troubleshoot and repair any problems that arise in sheet metal installations.

## Please Note

> The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

## General Education Requirements (26 Credits):

<table>
<thead>
<tr>
<th>Mathematics (4 credits)</th>
<th>SMTL 124B</th>
</tr>
</thead>
</table>

**English Composition (3 credits)**

ENG 101 or 102 or 107

**Communications (3 credits)**

COM 101 or 215; or ENG 101

**Human Relations 2 credits**

SMTL 260B

**Natural Sciences (7-8 credits)**

SMTL 115B and one set of the following: AST 101 and 105; or BIOL 101; or CHEM 105 and 106; or GEOG 103 and 104; or GEOL 100; or PHYS 110

**Fine Arts/Humanities/Social Science (3 credits)**

ANTH 101; ART 160; ECON 121, 125; PHIL 102; PSY 101; SOC 101

**U.S. and Nevada Constitutions (4-6 credits)**

PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

## Special Program Requirements (34 Credits)

### Fourth Year:

**Choose 2 from the following in 1 discipline (8 credits):**

- SMTL 243B TAB II
- SMTL 243B TAB III
- SMTL 243B TAB IV
- SMTL 244B Advanced Welding/Industrial I
- SMTL 244B Advanced Welding/Industrial II
- SMTL 245B HVAC-R Equipment I
- SMTL 245B HVAC-R Equipment II
- SMTL 246B Food Service Equipment Fabrication/Installation I
- SMTL 246B Food Service Equipment Fabrication/Installation II
- SMTL 249B Food Service Equipment Fabrication/Installation III

### Third Year:

**Choose level III and level IV of the above chosen classes (8 credits):**

- SMTL 261B TAB III
- SMTL 262B TAB IV
- SMTL 263B Advanced Welding/Industrial III
- SMTL 264B Advanced Welding/Industrial IV
- SMTL 265B HVAC-R Equipment III
- SMTL 266B HVAC-R Equipment IV
- SMTL 267B Food Service Equipment Fabrication/Installation III
- SMTL 268B Food Service Equipment Fabrication/Installation IV
- SMTL 269B CAD/Detailing III
- SMTL 270B CAD/Detailing IV
- SMTL 284B Architectural Sheet Metal III
- SMTL 285B Architectural Sheet Metal IV

### Second Year:

- SMTL 111B First Aid/CPR I 0.5
- SMTL 113B Sheet Metal Drafting 4
- SMTL 114B Layout/Fabrication I 4
- SMTL 121B OSHA 10 1
- SMTL 122B Sheet Metal Plans and Specifications 4
- SMTL 123B Layout/Fabrication II 4

### First Year:

- SMTL 111B First Aid/CPR I 0.5
- SMTL 113B Sheet Metal Drafting 4
- SMTL 114B Layout/Fabrication I 4
- SMTL 121B OSHA 10 1

## Special Notes

- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any SMTL journeyman course offered for credit may be substituted for any of the above SMTL apprentice courses. Please contact the program coordinator for more details.

Special consideration will be given students who complete the Sheet Metal Trades Associate of Applied Science Degree if they are affected by the retroactive six year rule.
Sheet Metal
CERTIFICATE OF ACHIEVEMENT (CA)
REQUIRED CREDITS: 32
DEGREE CODE: SHEMET-CT

PROGRAM DESCRIPTION
This program prepares the student for employment as a Journeyman Sheet Metal Worker with the Sheet Metal Union. This is a restricted entry program. Students MUST be indentured in the Sheet Metal Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable sheet metal tools.
• Comprehend and utilize formulas used in the calculations of all phases of sheet metal installations.
• Demonstrate the ability to troubleshoot and repair any problems that arise in sheet metal installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)
COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (29 CREDITS)

First Year:
SMTL 111B First Aid/CPR I 0.5
SMTL 113B Sheet Metal Drafting 4
SMTL 114B Layout/Fabrication I 4
SMTL 115B Sheet Metal Apprentice I 3
SMTL 121B OSHA 10 1

Second Year:
SMTL 122B Sheet Metal Plans and Specifications 4
SMTL 123B Layout/Fabrication II 4
SMTL 124B Sheet Metal Apprentice II 4

Third Year:
SMTL 230B First Aid/CPR II 0.5

CHOOSE ELECTIVES (4 credits)
SMTL 234B Architectural Sheet Metal I 4
SMTL 240B CAD/Detailing I 4
SMTL 242B TAB I 4
SMTL 244B Advanced Welding/Industrial I 4
SMTL 246B HVAC-R Equipment I 4
SMTL 248B Food Service Equipment Fabrication/Installation I 4

Computation included in SMTL 114B, 115B, 123B, 124B
Human Relations included in SMTL 115B, 121B, 124B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any SMTL journeyman course offered for credit may be substituted for any of the above SMTL apprentice courses. Please contact the program coordinator for details.
Special consideration will be given students who complete the Sheet Metal Trades Certificate of Achievement if they are affected by the retroactive six year rule.
Stationary Engineers
ASSOCIATE OF APPLIED SCIENCE (AAS)  REQUIRED CREDITS: 64  DEGREE CODE: OPME-AAS

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Stationary and Maintenance Engineer. This is a restricted entry program. Students MUST be indentured in the Stationary Engineers Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing math, science, and human relations skills are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable Stationary and Maintenance Engineers tools.
• Comprehend and utilize formulas used in the calculations of all phases of Stationary and Maintenance Engineering work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in Stationary and Maintenance Engineering systems.

PLEASE NOTE • The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (28 CREDITS)

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATHEMATICS (3 credits)</td>
<td></td>
</tr>
<tr>
<td>OPME 120B</td>
<td></td>
</tr>
<tr>
<td>ENGLISH COMPOSITION (3 credits)</td>
<td></td>
</tr>
<tr>
<td>ENG 101 or 102 or 107</td>
<td></td>
</tr>
<tr>
<td>COMMUNICATIONS (3 credits)</td>
<td></td>
</tr>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td></td>
</tr>
<tr>
<td>COMPUTING (3 credits)</td>
<td></td>
</tr>
<tr>
<td>IS 101</td>
<td></td>
</tr>
<tr>
<td>HUMAN RELATIONS (3 credits)</td>
<td></td>
</tr>
<tr>
<td>OPME 123B</td>
<td></td>
</tr>
<tr>
<td>NATURAL SCIENCE (6 credits)</td>
<td></td>
</tr>
<tr>
<td>OPME 107B and 109B</td>
<td></td>
</tr>
<tr>
<td>FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)</td>
<td></td>
</tr>
<tr>
<td>ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101</td>
<td></td>
</tr>
<tr>
<td>U.S. AND NEVADA CONSTITUTIONS (4-6 credits)</td>
<td></td>
</tr>
<tr>
<td>PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217</td>
<td></td>
</tr>
</tbody>
</table>

SPECIAL PROGRAM REQUIREMENTS (36 CREDITS)

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPME 102B Fundamentals of Electricity</td>
<td>3</td>
</tr>
<tr>
<td>OPME 103B Introduction to the National Electric Code</td>
<td>3</td>
</tr>
<tr>
<td>OPME 105B Domestic Refrigeration</td>
<td>2</td>
</tr>
<tr>
<td>OPME 106B Mechanical Power Transmission (Instrumentation)</td>
<td>3</td>
</tr>
<tr>
<td>OPME 108B Fluid Power (Pneumatics, Hydraulics, Instrumentation)</td>
<td>3</td>
</tr>
<tr>
<td>OPME 110B Electrical, Heating and Cooling</td>
<td>4</td>
</tr>
<tr>
<td>OPME 114B Automated Manufacturing Control</td>
<td>3</td>
</tr>
<tr>
<td>OPME 122B Introduction to Oxy-Acetylene Welding</td>
<td>3</td>
</tr>
<tr>
<td>OPME 133B Air Conditioning Theory</td>
<td>6</td>
</tr>
<tr>
<td>OPME 144B Industrial Electricity</td>
<td>3</td>
</tr>
<tr>
<td>OPME 212 Welding I</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any OPME journeyman course offered for credit may be substituted for any of the above OPME apprenticeship courses. Please contact the program coordinator for more details.
  Special consideration will be given students who complete the Operating Maintenance Engineers Associate of Applied Science if they are affected by the retroactive six year rule.

530
CSN 2018-2019 GENERAL CATALOG & STUDENT HANDBOOK

APPRENTICESHIP STUDIES
Stationary Engineers
CERTIFICATE OF ACHIEVEMENT (CA) REQUIRED CREDITS: **30** DEGREE CODE: **OPME-CT**

**PROGRAM DESCRIPTION**
This program prepares students for employment as a Journeyman Stationary and Maintenance Engineer. **This is a restricted entry program. Students MUST be indentured in the Stationary Engineers Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

**STUDENT LEARNING OUTCOMES**
- Comprehend and utilize all applicable stationary and maintenance engineering tools.
- Comprehend and utilize formulae used in the calculations of all phases of stationary and maintenance engineering work.
- Demonstrate the ability to troubleshoot and repair any problems that arise in stationary and maintenance engineering systems.

**PLEASE NOTE** - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

**GENERAL EDUCATION REQUIREMENTS (3 CREDITS)**

<table>
<thead>
<tr>
<th>COMMUNICATIONS (3 credits) COM 101 or 215; or ENG 101</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPME 102B Fundamentals of Electricity</td>
</tr>
<tr>
<td>OPME 103B Introduction to the National Electric Code</td>
</tr>
<tr>
<td>OPME 105B Domestic Refrigeration</td>
</tr>
<tr>
<td>OPME 106B Mechanical Power Transmission (Instrumentation)</td>
</tr>
<tr>
<td>OPME 107B Low Pressure Steam</td>
</tr>
<tr>
<td>OPME 108B Fluid Power (Pneumatics, Hydraulics, Instrumentation)</td>
</tr>
<tr>
<td>OPME 109B High Pressure Steam</td>
</tr>
<tr>
<td>OPME 110B Electrical, Heating and Cooling</td>
</tr>
<tr>
<td>OPME 114B Automated Manufacturing Control</td>
</tr>
</tbody>
</table>

Computation included in OPME 106B, 108B, 110B, 114B
Human Relations included in OPME 108B

**SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)**

| OPME 102B Fundamentals of Electricity | 3 |
| OPME 103B Introduction to the National Electric Code | 3 |
| OPME 105B Domestic Refrigeration | 2 |
| OPME 106B Mechanical Power Transmission (Instrumentation) | 3 |
| OPME 107B Low Pressure Steam | 3 |
| OPME 108B Fluid Power (Pneumatics, Hydraulics, Instrumentation) | 3 |
| OPME 109B High Pressure Steam | 3 |
| OPME 110B Electrical, Heating and Cooling | 4 |
| OPME 114B Automated Manufacturing Control | 3 |

Computation included in OPME 106B, 108B, 110B, 114B
Human Relations included in OPME 108B

**NOTE** • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any OPME journeyman course offered for credit may be substituted for any of the above OPME apprenticeship courses. Please contact the program coordinator for details.

Special consideration will be given to students who complete the Operating Maintenance Engineers Certificate of Achievement if they are affected by the retroactive six year rule.
Program Description

This program prepares the student for employment as a Structural Steel Ironworker Journeyman with the Ironworkers Union. This is a restricted entry program. Students MUST be indentured in the Structural Steel Ironworkers Apprenticeship Program before enrolling in classes. In addition to special program courses, academic skills emphasizing math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 651-4163.

Student Learning Outcomes

• Comprehend and utilize all applicable Structural Steel Ironworker tools.
• Comprehend and utilize all formulas used in the calculations of all phases of Structural Steel Ironworker work.
• Comprehend the ability to troubleshoot and repair any problems that arise in Structural Steel installations.

Please Note - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

General Education Requirements (27 Credits)

Mathematics (3 credits)
MATH 116

English Composition (3-5 credits)
ENG 100 or 101 or 107 or 113

Communications (3 credits)
COM 101 or 215; or ENG 102

Human Relations (3 credits)
MGT 100B

Natural Science (8 credits)
EGG 131 and 131L and 132

Fine Arts/Humanities/Social Science (3 credits)
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. and Nevada Constitutions (4-6 credits)
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

Special Program Requirements (35 Credits)

IRW 110B Introduction to Ironworking 3
IRW 111B Introduction to Major Work Areas 2
IRW 112B Metal Buildings 1
IRW 113B Ironworker History/C.O.M.E.T. 3
IRW 114B Mixed Base for Ironworkers 3
IRW 134B Lead Hazard Awareness 2
IRW 150B Rigging for Ironworkers 3
IRW 152B Welding I for Ironworkers 2
IRW 153B Structural Steel I 2
IRW 156B Welding II for Ironworkers 2
IRW 203B Structural Steel II 2
IRW 207B Structural Steel III/Cranes 2
IRW 208B Foreman Training for Ironworkers 3
IRW 211B Architectural I 2
IS 101 Introduction to Information Systems 3

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any IRW journeyman course offered for credit may be substituted for any of the above IRW apprentice courses. Please contact the program coordinator for more details.
Special consideration will be given students who complete the Trade Union Ironworker Apprentice Associate of Applied Science if they are affected by the retroactive six year rule.
PROGRAM DESCRIPTION
This program prepares the student for employment as a Structural Steel Ironworker Journeyman with the Ironworkers Union. This is a restricted entry program. Students MUST be indentured in the Structural Steel Ironworkers Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable structural steel tools.
- Comprehend and utilize all formulas used in the calculations of all phases of structural steel work.
- Comprehend the ability to troubleshoot and repair any problems that arise in structural steel installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3-5 CREDITS)
COMMUNICATIONS (3-5 credits)
COM 101 or 215; or ENG 100 or 101 or 113

SPECIAL PROGRAM REQUIREMENTS (28 CREDITS)
IRW 110B Introduction to Ironworking 3
IRW 111B Introduction to Major Work Areas 2
IRW 112B Metal Buildings 1
IRW 113B Ironworker History/C.O.M.E.T. 3
IRW 114B Mixed Base for Ironworkers 3
IRW 150B Rigging for Ironworkers 3
IRW 152B Welding I for Ironworkers 2
IRW 153B Structural Steel I 2
IRW 156B Welding II for Ironworkers 2
IRW 203B Structural Steel II 2
IRW 207B Structural Steel III/Cranes 2
IRW 208B Foreman Training for Ironworkers 3

Computation included in IRW 114B
Human Relations included in IRW 208B

NOTE - Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any IRW journeyman course offered for credit may be substituted for any of the above IRW apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Structural Steel Ironworker Certificate of Achievement if they are affected by the retroactive six year rule.

CERTIFICATE OF ACHIEVEMENT (CA)
REQUIRED CREDITS: 31
DEGREE CODE: IRWSTL-CT

PROGRAM DESCRIPTION
This program prepares the student for employment as a Structural Steel Ironworker Journeyman with the Ironworkers Union. This is a restricted entry program. Students MUST be indentured in the Structural Steel Ironworkers Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable structural steel tools.
- Comprehend and utilize all formulas used in the calculations of all phases of structural steel work.
- Comprehend the ability to troubleshoot and repair any problems that arise in structural steel installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3-5 CREDITS)
COMMUNICATIONS (3-5 credits)
COM 101 or 215; or ENG 100 or 101 or 113

SPECIAL PROGRAM REQUIREMENTS (28 CREDITS)
IRW 110B Introduction to Ironworking 3
IRW 111B Introduction to Major Work Areas 2
IRW 112B Metal Buildings 1
IRW 113B Ironworker History/C.O.M.E.T. 3
IRW 114B Mixed Base for Ironworkers 3
IRW 150B Rigging for Ironworkers 3
IRW 152B Welding I for Ironworkers 2
IRW 153B Structural Steel I 2
IRW 156B Welding II for Ironworkers 2
IRW 203B Structural Steel II 2
IRW 207B Structural Steel III/Cranes 2
IRW 208B Foreman Training for Ironworkers 3

Computation included in IRW 114B
Human Relations included in IRW 208B

NOTE - Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
- Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
  For more information visit www.csn.edu/honors.
- In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
- Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
- Any IRW journeyman course offered for credit may be substituted for any of the above IRW apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Structural Steel Ironworker Certificate of Achievement if they are affected by the retroactive six year rule.
Surveyors
ASSOCIATE OF APPLIED SCIENCE (AAS)

PROGRAM DESCRIPTION
This degree prepares students for employment as a Surveyor with the Operating Engineers Union. This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing math, science and human relations are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable surveyors’ tools.
• Comprehend and utilize formulas used in the calculations of all phases of surveyor’s work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in surveyor’s work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (30 CREDITS)

<table>
<thead>
<tr>
<th>MATHEMATICS (5 credits)</th>
<th>SPECIAL PROGRAM REQUIREMENTS (30 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPE 116B</td>
<td>OPE 101B Introduction to Apprenticeship/Operation and Maintenance 5</td>
</tr>
<tr>
<td>ENGLISH COMPOSITION (3 credits)</td>
<td>OPE 110B Technical Sketching 5</td>
</tr>
<tr>
<td>ENG 101 or 102 or 107</td>
<td>OPE 111B Land Surveying 5</td>
</tr>
<tr>
<td>COMMUNICATIONS (3 credits)</td>
<td>OPE 117B Applied Math for Surveyors 5</td>
</tr>
<tr>
<td>COM 101 or 215; or ENG 101</td>
<td>OPE 121B Boundary Surveys 5</td>
</tr>
<tr>
<td>HUMAN RELATIONS (5 credits)</td>
<td>OPE 122B Construction Surveys 5</td>
</tr>
<tr>
<td>OPE 283B</td>
<td></td>
</tr>
<tr>
<td>NATURAL SCIENCE (5 credits)</td>
<td></td>
</tr>
<tr>
<td>OPE 201B</td>
<td></td>
</tr>
</tbody>
</table>

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA CONSTITUTIONS (6 credits)
HIST 101 and HIST 102; or HIST 101 and HIST 217

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprenticeship courses. Please contact the program coordinator for more details.

Special consideration will be given students who complete the Operating Maintenance Engineers Associate of Applied Science if they are affected by the retroactive six year rule.
Surveyors

CERTIFICATE OF ACHIEVEMENT (CA)

REQUIRED CREDITS: 30

DEGREE CODE: OPESUV-CT

PROGRAM DESCRIPTION
This program prepares students for employment as a Surveyor with the Operating Engineers Union. **This is a restricted entry program. Students MUST be indentured in the Operating Engineers Apprenticeship Program before enrolling in classes.** For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
- Comprehend and utilize all applicable surveyors’ tools.
- Comprehend and utilize formulas used in the calculations of all phases of surveyor’s work.
- Demonstrate the ability to troubleshoot and repair any problems that arise in surveyor’s work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPE 101B</td>
<td>Introduction to Apprenticeship/Operation and Maintenance</td>
<td>5</td>
</tr>
<tr>
<td>OPE 110B</td>
<td>Technical Sketching</td>
<td>5</td>
</tr>
<tr>
<td>OPE 111B</td>
<td>Land Surveying</td>
<td>5</td>
</tr>
<tr>
<td>OPE 116B</td>
<td>Machinists/Surveyors Math</td>
<td>5</td>
</tr>
<tr>
<td>OPE 117B</td>
<td>Applied Math for Surveyors</td>
<td>5</td>
</tr>
<tr>
<td>OPE 270B</td>
<td>OSHA 30</td>
<td>2</td>
</tr>
</tbody>
</table>

Computation included in OPE 116B, 117B
Human Relations included in OPE 101B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please see the program coordinator for details. Special consideration will be given students who complete the Operating Engineers Certificate of Achievement if they are affected by the retroactive six year rule.
Teamster Convention Training
ASSOCIATE OF APPLIED SCIENCE (AAS)

REQUIRED CREDITS: 61
DEGREE CODE: CONVEN-AAS

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Convention Teamster with the Teamsters Union. This is a restricted entry program. Students MUST be indentured in the Convention Teamster Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing math, science, and human relations components are stressed to prepare students to meet the challenges common in the work place. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable convention teamster tools.
• Comprehend and utilize formulas used in the calculations of all phases of convention teamster work.
• Demonstrate the ability to troubleshoot and repair any problems that arise in convention teamster work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (34 CREDITS)

MATHEMATICS (3 credits)
MATH 116

ENGLISH COMPOSITION (6 credits)
ENG 101 or 102 or 107

COMMUNICATIONS (6 credits)
COM 101 and 215

HUMAN RELATIONS (3 credits)
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B; SOC 101

NATURAL SCIENCE (7 credits)
AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ART 160; ECON 100; PHIL 102; PSY 101

U.S. AND NEVADA CONSTITUTIONS (6 credits)
HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

TMST 100B OSHA General Industry Class 1
TMST 120B Introduction to the Convention Industry 2
TMST 130B Beginning Decorating 2
TMST 140B Beginning Systems 1
TMST 150B Beginning Design and Repair 2
TMST 160B Beginning Installation and Dismantle 2
TMST 170B Forklift Theory 3
TMST 200B Advanced Forklift 3
TMST 220B Advanced Installation and Dismantle 3
TMST 230B Lead Foreman Training 2
TMST 240B First Aid/CPR 1
TMST 250B Condor Operating 3
TMST 260B Rigging 1
TMST 270B Scissor Lift 1

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any TMST journeyman course offered for credit may be substituted for any of the above TMST apprentice courses. Please contact the program coordinator for more details.

Special consideration will be given students who complete the TMST Associate of Applied Science Degree if they are affected by the retroactive six year rule.
Teamster Convention Training
CERTIFICATE OF ACHIEVEMENT (CA)
REQUIRED CREDITS: 30
DEGREE CODE: CONVEN-CT

PROGRAM DESCRIPTION
This program prepares students for employment as a Journeyman Convention Teamster with the Teamsters Union. This is a restricted entry program. Students MUST be indentured in the Convention Teamster Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable convention teamster tools.
• Comprehend and utilize formulas used in the calculations of all phases of convention teamster work.
• Comprehend the ability to troubleshoot and repair any problems that arise in convention teamster work.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMST 100B OSHA General Industry Class</td>
<td>1</td>
</tr>
<tr>
<td>TMST 120B Introduction to the Convention Industry</td>
<td>2</td>
</tr>
<tr>
<td>TMST 130B Beginning Decorating</td>
<td>2</td>
</tr>
<tr>
<td>TMST 140B Beginning Systems</td>
<td>1</td>
</tr>
<tr>
<td>TMST 150B Beginning Design and Repair</td>
<td>2</td>
</tr>
<tr>
<td>TMST 160B Beginning Installation and Dismantle</td>
<td>2</td>
</tr>
<tr>
<td>TMST 170B Forklift Theory</td>
<td>3</td>
</tr>
<tr>
<td>TMST 200B Advanced Forklift</td>
<td>3</td>
</tr>
<tr>
<td>TMST 220B Advanced Installation and Dismantle</td>
<td>3</td>
</tr>
<tr>
<td>TMST 230B Lead Foreman Training</td>
<td>2</td>
</tr>
<tr>
<td>TMST 240B First Aid/CPR</td>
<td>1</td>
</tr>
<tr>
<td>TMST 250B Condor Operating</td>
<td>3</td>
</tr>
<tr>
<td>TMST 260B Rigging</td>
<td>1</td>
</tr>
<tr>
<td>TMST 270B Scissor Lift</td>
<td>1</td>
</tr>
</tbody>
</table>

Computation included in TMST 160B, 220B
Human Relations included in TMST 130B, 160B, 200B, 220B, 230B

NOTE • Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any TMST journeyman course offered for credit may be substituted for any of the above TMST apprentice courses. Please see the program coordinator for details. Special consideration will be given students who complete the Teamster Convention Training, Certificate of Achievement if they are affected by the retroactive six year rule.
Tile Setter
ASSOCIATE OF APPLIED SCIENCE (AAS)

REQUwRED CREDITS: 60
DEGREE CODE: TILE-AAS

PROGRAM DESCRIPTION
This degree prepares students for employment as a Journeyman Tile Setter with the Tile Setters Union. This is a restricted entry program. Students MUST be indentured in the Tile Setters Apprenticeship Program before enrolling in classes. Along with special program courses, academic skills emphasizing related math, science and human relations components are stressed to prepare students to meet the challenges common in the workplace. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES

• Comprehend and utilize all applicable tile setting tools.
• Comprehend and utilize formulas used in the calculations of all phases of tile setting.
• Demonstrate the ability to troubleshoot and repair any problems that arise in tile setting installations.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (33 CREDITS)

MATHMATICS (3 credits)
MATH 116

ENGLISH COMPOSITION (6 credits)
ENG 101 or 102 or 107

COMMUNICATIONS (6 credits)
COM 101 or 215; or ENG 101

HUMAN RELATIONS (3 credits)
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B

NATURAL SCIENCE (8 credits)
AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110

FINE ARTS/HUMANITIES/SOCIAL SCIENCE (3 credits)
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101

U.S. AND NEVADA CONSTITUTIONS (4-6 credits)
PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

TLS 101B Tile Setter Apprentice I 4
TLS 102B Tile Setter Apprentice II 4
TLS 105B OSHA/First Aid/CPR for Tile Setters 3
TLS 151B Tile Setter Apprentice II 4
TLS 152B Tile Setter Apprentice III 4
TLS 201B Tile Setter Apprentice IV 4
TLS 202B Tile Setter Apprentice V 4

NOTE
• Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any TLS journeyman course offered for credit may be substituted for any of the above TLS apprentice courses. Please contact the program coordinator for more details.

Special consideration will be given students who complete the Tile Setters Trade Associate of Applied Science if they are affected by the retroactive six year rule.
Tile Setter
CERTIFICATE OF ACHIEVEMENT (CA)

REQUIRED CREDITS: 30
DEGREE CODE: TILE-CT

PROGRAM DESCRIPTION
This program prepares students for employment as a Journeyman Tile Setter with the Tile Setters Union. This is a restricted entry program. Students MUST be indentured in the Tile Setters Apprenticeship Program before enrolling in classes. For further information, contact the Division of Apprenticeship Studies at 702-651-4163.

STUDENT LEARNING OUTCOMES
• Comprehend and utilize all applicable tile setter tools.
• Comprehend and utilize formulas used in the calculations of all phases of tile setting.
• Comprehend the ability to troubleshoot and repair any problems that arise in tile setting installations.

PLEASE NOTE: The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

COMMUNICATIONS (3 credits)
COM 101 or 215; or ENG 101

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

TLS 101B  Tile Setter Apprentice I  4
TLS 102B  Tile Setter Apprentice IB  4
TLS 105B  OSHA/First Aid/CPR for Tile Setters  3
TLS 151B  Tile Setter Apprentice II  4
TLS 152B  Tile Setter Apprentice IIIB  4
TLS 201B  Tile Setter Apprentice III  4
TLS 202B  Tile Setter Apprentice IIIB  4

Computation included in TLS 101B, 102B, 151B, 152B, 201B, 202B
Human Relations included in TLS 101B, 102B

NOTE
• Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
• Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
• In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement which may be used to fulfill the corresponding general education or emphasis requirement.
• Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
• Any TLS journeyman course offered for credit may be substituted for any of the above TLS apprentice courses. Please contact the program coordinator for details. Special consideration will be given students who complete the Tile Setters Certificate of Achievement if they are affected by the retroactive six year rule.