# **Apprenticeship Studies**Bricklayers Emphasis

**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)** SPECIAL PROGRAM REQUIREMENTS (27 CREDITS) SEMESTER CR CR SEMESTER **MATHEMATICS** 3 Bricklayers' Apprentice I 4 BRL 101B **MATH 116** BRL 102B Bricklayers' Apprentice IB 4 BRL 105B OSHA/First Aid/CPR 3 ENGLISH COMPOSITION for Bricklayers ENG 101 or 102 or 107 BRL 151B Bricklayers' Apprentice II 4 **COMMUNICATIONS** BRL 152B Bricklayers' Apprentice IIB 4 COM 101 or 215; or ENG 101 BRL 201B Bricklayers' Apprentice III **HUMAN RELATIONS** 3 BRL 202B Bricklayers' Apprentice IIIB ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110 SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101 **U.S. AND NEVADA CONSTITUTIONS** 4-6 PSC 101; or

### $\underline{\text{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree.}$

- 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.



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

# **Apprenticeship Studies**Bricklayers Emphasis

DEGREE CODE: BRCKTD-CT

#### 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.

**REQUIRED CREDITS: 30** 

#### **GENERAL EDUCATION REQUIREMENTS (3 CREDITS)**

#### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS COM 101 or 215; or ENG 101	3		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 IIIB	4	

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

Human Relations included in BRL 101B, 102B

- 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.



# **Apprenticeship Studies**Carpentry Emphasis

REQUIRED CREDITS: 60

#### **DEGREE CODE: CART-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.

#### SPECIAL PROGRAM REQUIREMENTS (35 CREDITS) **GENERAL EDUCATION REQUIREMENTS (25 CREDITS)** SEMESTER CR CR SEMESTER **MATHEMATICS** 3 **CORE REQUIREMENTS MATH 116** CPT 102B Orientation 2. CPT 104B Safety and Health Certifications 2 **ENGLISH COMPOSITION** 3 ENG 101 or 102 or 107 CPT 105B Basic Wall Framing 1.5 CPT 107B Print Reading 2 **COMMUNICATIONS** 3 CPT 109B Basic Roof Framing 1.5 COM 101 or 215; or ENG 101 CPT 111B Wall Forming 1.5 **HUMAN RELATIONS** 3 CPT 113B Doors and Door Frames 1.5 ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B CPT 115B Transit Level/Laser 2 CPT 117B Foundations and Flat Work 1.5 NATURAL SCIENCE 6-7 CPT 119B Bridge Construction 1.5 AST 101; BIOL 101; CHEM 103; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110 CPT 121B Stair and Ramp Forming 1.5 CPT 123B Beam and Deck Forming 1.5 SOCIAL SCIENCE/HUMANITIES 3 CPT 125B Cabinet Millwork and Assembly 1.5 ANTH 101: ART 160: ECON 102: MUS 121, 125; PHIL 102; PSY 101; **CPT 127B** Commercial Floor Framing 1.5 SOC 101 CPT 129B Advanced Print Reading 2 U.S. AND NEVADA CONSTITUTIONS 4-6 CPT 131B Cabinet Installation 2. PSC 101: or **CHOOSE ELECTIVES (8 credits)** HIST 101 and HIST 102; or HIST 101 and HIST 217 CPT 133B Moldings and Trim 15 **CPT 135B** Tilt-Up Panel Construction 1.5 CPT 137B 2 Rigging CPT 141B 1.5 Basic Metal Framing **CPT 143B** Door and Door Hardware 1.5 CPT 145B Scaffold Erector Qualification 2

- 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 Trade Associate of Applied Science if they are affected by the retroactive six year rule.



# Apprenticeship Studies Carpentry Emphasis

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.

<u>PLEASE NOTE</u> - 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 (27 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS	3		CPT 102B	Orientation	2	
COM 101 or 215; or ENG 101			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.



## Apprenticeship Studies Cement Mason Emphasis

REQUIRED CREDITS: 60 DEGREE CODE: CEMENT-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)**

#### SPECIAL PROGRAM REQUIREMENTS (30 CREDITS)

	CR	SEMESTER		CR	SEMESTER
MATHEMATICS MATH 116	3		CMA 111B Cement Mason Apprentice I	4	
ENGLISH COMPOSITION	3		CMA 112B Cement Mason Apprentice IB CMA 141B Cement Mason Apprentice II	3	
ENG 101 or 102 or 107			CMA 142B Cement Mason Apprentice IIB CMA 201B Cement Mason Apprentice III	4 3	
COMMUNICATIONS COM 101, 215; ENG 101	6		CMA 202B Cement Mason Apprentice IIIB	4	
HUMAN RELATIONS MGT 100B or PSY 101 or SOC 101	3		CMA 251B Cement Mason Apprentice IV CMA 252B Cement Mason Apprentice IVB	3 4	
NATURAL SCIENCE EGG 131 and 132	8		PLCM 270B OSHA 30	2	
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3				
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217	4-6				

### $\underline{\text{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree.}$

- 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.



## Apprenticeship Studies Cement Mason Emphasis

REQUIRED CREDITS: 31 DEGREE CODE: CEMENT-CT

#### 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.

#### GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

### SPECIAL PROGRAM REQUIREMENTS (28 CREDITS)

	CR	SEMESTER		CR	SEMESTER
COMMUNICATIONS COM 101 or 215; or ENG 101	3		CMA 111B Cement Mason Apprentice I	4	
			CMA 112B Cement Mason Apprentice IB	3	
			CMA 141B Cement Mason Apprentice II	3	
			CMA 142B Cement Mason Apprentice IIB	4	
			CMA 201B Cement Mason Apprentice III	3	
			CMA 202B Cement Mason Apprentice IIIB	4	
			CMA 251B Cement Mason Apprentice IV	3	
			CMA 252B Cement Mason Apprentice IVB	4	
			Computation included in CMA 141B, 142B		
			Human Relations included in CMA 111B, 112B, 142B, 202B, 251B	01B,	

**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.



## **Apprenticeship Studies**Drywall Applicator Emphasis

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

#### 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)

### SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

	CR	SEMESTER		CR	SEMESTER
MATHEMATICS MATH 116	3		CORE REQUIREMENTS (27 credits) CPT 102B Orientation	2	
ENGLISH COMPOSITION	3		CPT 104B Safety and Health Certifications	2	
ENG 101 or 102 or 107			CPT 107B Print Reading CPT 113B Door and Door Frames	2 1.5	
COMMUNICATIONS COM 101 or 215; or ENG 101	3		CPT 129B Advanced Print Reading	2	
HUMAN RELATIONS	3		DWA 105B Basic Metal Framing DWA 109B Basic Lathing	1.5 1.5	
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B			DWA 111B Drywall Application	1.5	
NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110	6-7		DWA 113B Drywall Application/Finish Trims DWA 115B Framing Ceilings and Soffits	1.5 1.5	
			DWA 117B Framing Cennigs and Sorius  DWA 117B Framing Curves and Arches	1.5	
SOCIAL SCIENCE/HUMANITIES	3		DWA 119B Framing Suspended Ceilings	1.5	
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101;			DWA 121B Advanced Metal Framing DWA 125B Drywall/Acoustical Ceilings	1.5 1.5	
SOC 101			DWA 129B Free-Form Lathing	2	
U.S. AND NEVADA CONSTITUTIONS PSC 101; or	4-6		DWA 131B Light Gage Welding - AWS	2	
HIST 101 and HIST 102; or HIST 101 and HIST 217			CHOOSE ELECTIVES (8 credits) CPT 137B Rigging	8 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	

- 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.



# **Apprenticeship Studies**Drywall Applicator Emphasis

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)

#### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS	3		CPT 102B	Orientation	2	
COM 101 or 215; or ENG 101			CPT 104B	Safety and Health Certifications	2	
			CPT 107B	Print Reading	2	
			CPT 113B	Doors 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 Installation/Finish Trims	1.5	
			DWA 115B	Framing Ceilings and Soffits	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	
			Computation	n included in DWA 117B		

Human Relations included in CPT 102B

 $\underline{\text{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree.}$ 

- 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.



## **Apprenticeship Studies**

**Environmental and Construction Laborer Emphasis** 

REQUIRED CREDITS: 60 DEGREE CODE: LBCONT-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)** SPECIAL PROGRAM REQUIREMENTS CONTINUED CR SEMESTER CR SEMESTER MATHEMATICS 3 APP 107B Concrete Walls and Columns Work 2 **MATH 116** APP 127B 2 Rigging and Signaling **CHOOSE ELECTIVES (19 credits) ENGLISH COMPOSITION** 3 ENG 101 or 102 or 107 APP 108B Body Mechanics and Fall Protection APP 120B Confined Space Awareness 2 **COMMUNICATIONS** 3 APP 121B Line and Grade 4 COM 101 or 215; or ENG 101 APP 122B Oxyfuel Gas Cutting 4 APP 123B 3 Blueprint Reading for Laborers **HUMAN RELATIONS** 3 ALS 101; ANTH 101, 112; HIST 105; APP 128B Asphalt HMS 130; MGT 100B APP 130B Hazardous Waste Handling for Laborers APP 132B Radiation NATURAL SCIENCE 8 APP 134B Lead Abatement 2 AST 101; BIOL 101; CHEM 103; APP 136B Asbestos Abatement 2 EGG 131, 132; ENV 101; GEOG 103, 104; APP 137B Pipe Laying (Gravity Flow) 2 GEOL 100; PHYS 110 Pipe Laying (Pressurized) APP 139B 2 **SOCIAL SCIENCE/HUMANITIES** 3 APP 140B Scaffold Building 2 ANTH 101; ART 160; ECON 101; APP 142B Forklift Operations and Awareness 1 MUS 121, 125; PHIL 102; PSY 101; APP 144B Operation of Motor Driven Power Equipment SOC 101 APP 146B Operation of Concrete Core Drilling 1 **U.S. AND NEVADA CONSTITUTION** 4-6 Saw Cutting and Compaction Equipment PSC 101: or APP 150B Mason Tending (Trowel) 2 HIST 101 and HIST 102; or APP 152B Plaster Tending (Mixing) 2 HIST 101 and HIST 217 APP 160B Miners Preparedness and Awareness 4 APP 162B Drilling and Blasting 4 APP 164B Pneumatic Air Tool Handling APP 166B Mine Rescue SPECIAL PROGRAM REQUIREMENTS (33 CREDITS) APP 168B Microbial Remediation APP 200B OSHA for Laborers 2 CR SEMESTER APP 212B 2 **CORE REQUIREMENTS (14 credits)** Foreman Preparedness Weatherization Installation Technician 5 APP 102B Introduction to Apprentice Craft 4 APP 263B APP 104B General Construction 4 APP 266B Weatherization Supervisor 3 APP 105B Concrete Flat Work 2 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.



## **Apprenticeship Studies**

**Environmental and Construction Laborer Emphasis** 

#### REQUIRED CREDITS: 30 DEGREE CODE: LBCONT-CT

#### 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.

<u>PLEASE NOTE</u> - 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 CONTINUED

		CR	SEMESTER			CR	SEMESTER
COMMUN	ICATIONS	3		CHOOSE I	ELECTIVES (13 credits)		
COM 101 o	r 215; or ENG 101			APP 108B	Body Mechanics and Fall Protection	1	
				APP 120B	Confined Space Awareness	2	
SPECIAL	PROGRAM REQUIREMENTS (2	7 CREDI	TS)	APP 121B	Line and Grade	4	
<u> </u>	THOUNT NEGOMENTENTS (2	CICLDI	,	APP 122B	Oxyfuel Gas Cutting	4	
		CR	SEMESTER	APP 123B	Blueprint Reading for Laborers	3	
CORE REC	QUIREMENTS (14 credits)	CK	SEMESTER	APP 128B	Asphalt	2	
APP 102B	Introduction to Apprentice Craft	4		APP 130B	Hazardous Waste Handling for Laborers	4	
	11			APP 132B	Radiation	1	
APP 104B	General Construction	4		APP 134B	Lead Abatement	2	
APP 105B	Concrete Flat Work	2		APP 136B	Asbestos Abatement	2	
APP 107B	Concrete Walls and Columns Work	2		APP 139B	Pipe Laying (Pressurized)	2	
APP 127B	Rigging and Signaling	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	n included in APP 104B, 105B, 107B, 120B, 12	1B	
				Human Rela	ations included in APP 102B, 212B		

- 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.



## Apprenticeship Studies Equipment Operators Emphasis

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)** SPECIAL PROGRAM REQUIREMENTS (35 CREDITS) CR SEMESTER CR SEMESTER **MATHEMATICS** 3 CORE REQUIREMENTS (30 credits) **MATH 116** OPE 101B Introduction to Apprenticeship/Operation and Maintenance **ENGLISH COMPOSITION** 3 OPE 153B Grade Checking I 5 ENG 101 or 102 or 107 OPE 155B Plan Reading/Grade Checking II 5 **COMMUNICATIONS** 3 OPE 157B Specialized Equipment 5 COM 101 or 215; or ENG 101 OPE 159B 5 Cranes **HUMAN RELATIONS** 3 OPE 201B Hazardous Materials Handling Awareness 5 ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B **CHOOSE ELECTIVES (5 credits)** OPE 108B Hydraulics 5 NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; OPE 212B Welding 5 EGG 131, 132; ENV 101; GEOG 103, 104; 5 OPE 214B Heavy Equipment Repair GEOL 100; PHYS 110 OPE (any) journeyman classes offered for college credit SOCIAL SCIENCE/HUMANITIES 3 (credit may vary). ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101 U.S. AND NEVADA CONSTITUTIONS 4-6 PSC 101; or

### **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.



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

# **Apprenticeship Studies**Equipment Operators Emphasis

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.

**REQUIRED CREDITS: 30** 

#### 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)

#### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS COM 101 or 215; or ENG 101	3		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	
				n included in OPE 153B, 155B		
			Human Rela	ations included in OPE 101B		

- 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.



# **Apprenticeship Studies**Floor Coverer Emphasis

REQUIRED CREDITS: 60 DEGREE CODE: FLOOR-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)**

### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

	CR	SEMESTER		CR	SEMESTER
MATHEMATICS MATH 116	3		FLCV 100B Introduction to the Union and Construction Trade	1	
ENGLISH COMPOSITION	3		FLCV 111B Introduction to the Flooring Trade	3	
ENG 101 or 102 or 107	3		FLCV 121B Floor Installation Process	5	
COLD CINCOL TONG			FLCV 131B Carpet Installation Process	5	
COMMUNICATIONS COM 101 or 215; or ENG 101	3		FLCV 141B Special Floors and Finishes	3	
COM 101 01 213, 01 2130 101			FLCV 200B Math for Floor Coverers	2	
COMPUTING	3		FLCV 211B Drawings (Blueprints) for Floor Coverers	2	
IS 101			FLCV 221B Safety Awareness	4	
HUMAN RELATIONS ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B; SOC 101	3		FLCV 231B Leadership	2	
NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110	8				
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 101, 102, 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	6				
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217	4-6				

### $\underline{\text{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree.}$

- 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.



# **Apprenticeship Studies**Floor Coverer Emphasis

REQUIRED CREDITS: 30 DEGREE CODE: FLOOR-CT

#### 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) SPECIAL PROGRAM REQUIREMENTS (27 CREDITS) CR SEMESTER CR SEMESTER FLCV 100B Introduction to the Union and COMMUNICATIONS 3 COM 101 or 215; or ENG 101 Construction Trade 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.



## **Apprenticeship Studies**

General Construction Inspector Emphasis

#### REQUIRED CREDITS: 60 DEGREE CODE: OPECONSAAS

#### 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)** SPECIAL PROGRAM REQUIREMENTS (35 CREDITS) CR SEMESTER CR SEMESTER **CORE REQUIREMENTS (25 credits) MATHEMATICS** 3 **MATH 116** Hazardous Materials Handling Awareness **OPE 201B** 5 OPE 202B Soils Inspection and Testing 5 **ENGLISH COMPOSITION** 3 ENG 101 or 102 or 107 OPE 204B Reinforced Concrete Inspector 5 OPE 206B 5 Pre-Stressed Concrete Inspector **COMMUNICATIONS** 3 OPE 208B Structural Masonry Inspector 5 COM 101 or 215; or ENG 101 **HUMAN RELATIONS** 3 CHOOSE ELECTIVES (10 credits) ALS 101; ANTH 101, 112; HIST 105; OPE 209B 5 General Construction Inspector HMS 130; MGT 100B OPE 211B Spray Applied Fire Proofing Inspector 5 NATURAL SCIENCE OPE 213B Structural Steel and Bolting Inspector 5 AST 101; BIOL 101; CHEM 103; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110 SOCIAL SCIENCE/HUMANITIES 3 ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101 U.S. AND NEVADA CONSTITUTIONS 4-6 PSC 101: or HIST 101 and HIST 102; or

#### 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.



HIST 101 and HIST 217

## Apprenticeship Studies General Construction Inspector Emphasis

REQUIRED CREDITS: 30 DEGREE CODE: OPECONS-CT

Human Relations included in OPE 202B, 204B, 206B, 208B

#### 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 CREDITS)** SPECIAL PROGRAM REQUIREMENTS (27 CREDITS) CR SEMESTER CR SEMESTER COMMUNICATIONS 3 **OPE 201B** 5 Hazardous Materials Handling Awareness COM 101 or 215; or ENG 101 **OPE 202B** Soils Inspection and Testing 5 5 OPE 204B Reinforced Concrete Inspector 5 OPE 206B Pre-Stressed Concrete Inspector 5 OPE 208B Structural Masonry Inspector 2 **OPE 270B** OSHA 30 Computation included in OPE 202B, 204B, 206B, 208B

- 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.



## **Apprenticeship Studies** Glazier Emphasis

**REQUIRED CREDITS: 60** 

#### **DEGREE CODE: GLAZ-AAS**

#### 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)

#### SPECIAL PROGRAM REQUIREMENTS (33 CREDITS)

	CR	SEMESTER		CR	SEMESTER
MATHEMATICS	3		GLZR 111B Glazier I	5	
MATH 116			GLZR 112B Glazier II	3	
ENGLISH COMPOSITION	3		GLZR 121B Glazier III	4	
ENG 101 or 107			GLZR 122B Glazier IV	3	
COMMUNICATIONS	3		GLZR 131B Glazier V	5	
COM 101 or 215; or ENG 101	3		GLZR 132B Glazier VI	5	
WYN ALL Y DEV LEVONG			GLZR 141B Glazier VII	5	
HUMAN RELATIONS ALS 101; ANTH 101, 112; HIST 105;	3		GLZR 142B Glazier VIII	3	
HMS 130; MGT 100B					
NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110	8				
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3				
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217	4-6				

- 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 GLZR journeyman course offered for credit may be substituted for any of the above GLZR apprentice courses. Please contact the program coordinator for
    - 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.



# **Apprenticeship Studies**Glazier Emphasis

REQUIRED CREDITS: 30 DEGREE CODE: GLAZ-CT

#### 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)

#### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

	CR	SEMESTER		CR	SEMESTER
COMMUNICATIONS	3		GLZR 111B Glazier I	5	
COM 101 or 215; or ENG 101			GLZR 112B Glazier II	3	
			GLZR 121B Glazier III	4	
			GLZR 122B Glazier IV	3	
			GLZR 131B Glazier V	5	
			GLZR 132B Glazier VI	5	
			GLZR 270B OSHA 30	2	

Computation included in GLZR 111B, 112B, 131B

Human Relations included in GLZR 132B

**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 details.

Special consideration will be given students who complete the Glaziers Certificate of Achievement if they are affected by the retroactive six year rule..



# Apprenticeship Studies Heat and Frost Insulator Emphasis

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)

#### **SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)**

	CR	SEMESTER			CR	SEMESTER
<b>MATHEMATICS</b>	3		ASB 101B	Asbestos Worker I	4	
MATH 116			ASB 102B	Asbestos Worker II	3	
ENGLISH COMPOSITION	3		ASB 111B	Asbestos Worker III	3	
ENG 101 or 102 or 107			ASB 112B	Asbestos Worker IV	5	
COMMUNICATIONS	3		ASB 120B	Asbestos Worker V	4	
COM 101 or 215; or ENG 101	3		ASB 121B	Asbestos Worker VI	4	
THIMAN DEL ATIONIC	3		ASB 201B	Asbestos Worker VII	6	
HUMAN RELATIONS ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B	3		ASB 202B	Asbestos Worker VIII	6	
NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110	6					
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3					
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217	4-6					

### $\underline{\text{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree.}$

- 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.



## **Apprenticeship Studies** Heat and Frost Insulator Emphasis

**DEGREE CODE: HTFRST-CT** 

#### 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)

### SPECIAL PROGRAM REQUIREMENTS (29 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS	3		ASB 101B	Asbestos Worker I	4	
COM 101 or 215; or ENG 101			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	
			Computation	n included in ASB 101B, 111B		

Human Relations included in ASB 201B

**REQUIRED CREDITS: 32** 

- · 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.



## Apprenticeship Studies Heavy Duty Repairman Emphasis

**REQUIRED CREDITS: 60 DEGREE CODE: OPERPR-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)**

### SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

	CR	SEMESTER			CR	SEMESTER
MATHEMATICS MATH 116	3		OPE 101B	Introduction to Apprenticeship/Operation and Maintenance	5	
ENGLISH COMPOSITION ENG 101 or 102 or 107	3		OPE 108B OPE 124B	Hydraulics Blueprint Reading for Welders/Machinists	5 5	
COMMUNICATIONS COM 101 or 215; or ENG 101	3		OPE 201B OPE 210B	Hazardous Materials Handling Awareness Diesel and High Compression Engines	5 5	
HUMAN RELATIONS ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B	3		OPE 212B OPE 214B	Welding Heavy Equipment Repair	5 5	
NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110	6					
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3					
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217	4-6					

- 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 OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please contact the program coordinator for more
    - 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.



# Apprenticeship Studies Heavy Duty Repairman Emphasis

DEGREE CODE: OPERPR-CT

5

2

#### 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.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

- · 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.

#### CR SEMESTER CR SEMESTER COMMUNICATIONS 3 **OPE 101B** Introduction to Apprenticeship/Operation 5 COM 101 or 215; or ENG 101 and Maintenance **OPE 108B** Hydraulics 5 OPE 124B Blueprint Reading for Welders/Machinists 5 OPE 201B Hazardous Materials Handling Awareness 5

OPE 210B

OPE 270B

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

OSHA 30

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

Diesel and High Compression Engines

**REQUIRED CREDITS: 30** 

- 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.



## **Apprenticeship Studies** Inside Wireman Emphasis

**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)**

#### SPECIAL PROGRAM REQUIREMENTS (32 CREDITS)

	CR	SEMESTER		CR	SEMESTER
MATHEMATICS ELEC 121B	4		ELEC 111B Electrical Apprentice I	4	
ENGLISH COMPOSITION ENG 101 or 102 or 107	3		ELEC 112B Electrical Apprentice II ELEC 122B Electrical Apprentice IV	4 4	
COMMUNICATIONS COM 101 or 215; or ENG 101	3		ELEC 131B Electrical Apprentice V ELEC 132B Electrical Apprentice VI	4	
HUMAN RELATIONS ELEC 150B	4		ELEC 141B Electrical Apprentice VII ELEC 142B Electrical Apprentice VIII	4	
NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110	7		ELEC 152B Electrical Apprentice X	4	
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3				
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or	4-6				

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.



# **Apprenticeship Studies**Inside Wireman Emphasis

REQUIRED CREDITS: 30 DEGREE CODE: ELAPPR-CT

#### 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) SPECIAL PROGRAM REQUIREMENTS (27 CREDITS) SEMESTER SEMESTER CR CR COMMUNICATIONS 3 ELEC 111B Electrical Apprentice I 4 COM 101 or 215; or ENG 101 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

- 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.



## Apprenticeship Studies Installer/Technician Emphasis

REQUIRED CREDITS: 30 DEGREE CODE: ELEAPPR-CT

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

#### 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.

**GENERAL EDUCATION REQUIREMENTS (3 CREDITS)** 

· 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.

	CR	SEMESTER		CR	SEMESTER
COMMUNICATIONS	3		ELEC 127B Mobile Equipment Safety	1	
COM 101 or 215; or ENG 101			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		

### $\underline{\textbf{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree.}$

- 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.



# **Apprenticeship Studies**Sign Emphasis

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.

#### GENERAL EDUCATION REQUIREMENTS (3 CREDITS)

#### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

	CR	SEMESTER		CR	SEMESTER
COMMUNICATIONS	3		ELEC 127B Mobile Equipment Safety	1	
COM 101 or 215; or ENG 101			ELEC 137B OSHA 30	2	
			ELEC 171B Sign Apprentice I	4	
			ELEC 172B Sign Apprentice II	4	
			ELEC 173B Sign Apprentice III	4	
			ELEC 174B Sign Apprentice IV	4	
			ELEC 175B Sign Apprentice V	4	
			ELEC 176B Sign Apprentice VI	4	
			Computation included in ELEC 172B, 174B, 176B		
			Human Relations included in ELEC 171B, 176B		

 $\underline{\text{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree}.$ 

- 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.



## Apprenticeship Studies Machinist Emphasis

**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)

	CR	SEMESTER			CR	SEMESTER
MATHEMATICS OPE 116B	5		OPE 105B OPE 110B	Machine Tools I Technical Sketching	5 5	
ENGLISH COMPOSITION ENG 101 or 102 or 107	3		OPE 124B OPE 131B	Blueprint Reading for Welders/Machinists Introduction to Computer Aided Drafting	5	
COMMUNICATIONS COM 101 or 215; or ENG 101	3		OPE 201B OPE 212B	Hazardous Materials Handling Awareness Welding	5 5	
HUMAN RELATIONS OPE 101B	5					
NATURAL SCIENCE OPE 260B	5					
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3					
U.S. AND NEVADA CONSTITUTIONS HIST 101 and HIST 102; or HIST 101 and HIST 217	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 OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please contact the program coordinator for more
    - 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.



# **Apprenticeship Studies**Machinist Emphasis

REQUIRED CREDITS: 30 DEGREE CODE: OPEMACH-CT

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

#### 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 This program 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.

**GENERAL EDUCATION REQUIREMENTS (3 CREDITS)** 

• 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.

#### CR SEMESTER CR SEMESTER COMMUNICATIONS 3 **OPE 101B** Introduction to Apprenticeship/Operation 5 COM 101 or 215; or ENG 101 and Maintenance **OPE 105B** Machine Tools I 5 OPE 116B Machinists/Surveyors Math 5 OPE 124B Blueprint Reading for Welders/Machinists 5 **OPE 131B** Introduction to Computer Aided Drafting 5

**OPE 270B** 

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

OSHA 30

- 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.



# **Apprenticeship Studies**Millwright Emphasis

**REQUIRED CREDITS: 61** 

DEGREE CODE: MWA-AAS

#### 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)** SPECIAL PROGRAM REQUIREMENTS CONTINUED CR SEMESTER CR SEMESTER 3 CORE REQUIREMENTS CONTINUED **MATHEMATICS MATH 116** 2 CPT 137B Rigging 1.5 MWA 105B Millwright General Skills A **ENGLISH COMPOSITION** 3 ENG 101 or 102 or 107 MWA 107B Millwright General Skills B 1.5 MWA 109B Cutting and Burning 1.5 **COMMUNICATIONS** 3 MWA 111B Welding Fabrication A 1.5 COM 101 or 215; or ENG 101 MWA 113B Optics and Machinery Alignment 1.5 **HUMAN RELATIONS** 3 MWA 115B Machinery Shaft Alignment 1.5 ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B MWA 117B Structural Welding - AWS A 1.5 MWA 119B Structural Welding - AWS B 1.5 NATURAL SCIENCE MWA 121B Turbine Familiarization 1.5 AST 101; BIOL 101; CHEM 103; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110 MWA 125B Pumps 1.5 MWA 127B Turbine Maintenance 1.5 SOCIAL SCIENCE/HUMANITIES 3 MWA 129B Conveyor Systems 1.5 ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; MWA 131B Drives, Pulleys and Belts 1.5 SOC 101 MWA 133B Compressor Theory and Maintenance 1.5 **U.S. AND NEVADA CONSTITUTIONS** MWA 135B Machinery Installation and Erection A 1.5 4-6 PSC 101: or MWA 137B Machinery Installation and Erection B 1.5 HIST 101 and HIST 102; or HIST 101 and HIST 217 **CHOOSE ELECTIVES (4 credits)** SPECIAL PROGRAM REQUIREMENTS (32 CREDITS) CPT 115B Transit Level/Laser 2 CPT 129B Advanced Print Reading 2 CR SEMESTER CPT 145B Scaffold Erector Qualification 2 DWA 131B Light Gage Welding - AWS 2 **CORE REQUIREMENTS (32 credits)** CPT 102B 2 Orientation 2 Safety and Health Certifications CPT 104B CPT 107B Print Reading 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.



# **Apprenticeship Studies**Millwright Emphasis

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 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 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)

#### SPECIAL PROGRAM REQUIREMENTS (27.5 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS	3		CPT 102B	Orientation	2	
COM 101 or 215; or ENG 101			CPT 104B	Safety and Health Certifications	2	
			CPT 107B	Print Reading	2	
			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	
			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.



## **Apprenticeship Studies** Oil Well Drillers Emphasis

**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)

### SPECIAL PROGRAM REQUIREMENTS (30 CREDITS)

	CR	SEMESTER		CR	SEMESTER
MATHEMATICS MATH 116	3		CORE REQUIREMENTS (25 credits)  OPE 101B Introduction to Apprenticeship/Operation and Maintenance	5	
ENGLISH COMPOSITION ENG 101 or 102 or 107	3		OPE 173B Drilling I	5	
COMMUNICATIONS COM 101 or 215; or ENG 101	3		OPE 175B Drilling II OPE 177B Drilling III	5 5	
<b>COMPUTING</b> CIT 100B, 102B, 103B, 106B, 107B,	1		OPE 201B Hazardous Materials Handling Awareness	5	
108B, 109B			CHOOSE ELECTIVES (5 credits)  OPE 157B Specialized Equipment	5	
HUMAN RELATIONS ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B	3		OPE 212B Welding OPE 214B Heavy Equipment Repair or	5 5	
NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110	8		OPE (any) journeyman classes offered for College credit (credit may vary).		
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3				
U.S. AND NEVADA CONSTITUTIONS HIST 101 and HIST 102; or HIST 101 and HIST 217	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 OPE journeyman course offered for credit may be substituted for any of the above OPE apprentice courses. Please contact the program coordinator for more
    - 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.



# Apprenticeship Studies Oil Well Drillers Emphasis

REQUIRED CREDITS: 30 DEGREE CODE: OPEOIL-CT

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

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

#### 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.

**GENERAL EDUCATION REQUIREMENTS (3 CREDITS)** 

- · 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.

#### CR SEMESTER CR SEMESTER COMMUNICATIONS 3 **OPE 101B** Introduction to Apprenticeship/Operation 5 COM 101 or 215; or ENG 101 and Maintenance **OPE 173B** Drilling I 5 **OPE 175B** Drilling II 5 OPE 177B Drilling III 5 OPE 201B Hazardous Materials Handling Awareness 5 OPE 270B OSHA 30 2

- 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.



# **Apprenticeship Studies**Painter Emphasis

**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)** SPECIAL PROGRAM REQUIREMENTS (30 CREDITS) CR **SEMESTER** CR **SEMESTER** MATHEMATICS 3 PTD 101B Painting/Decorating Apprentice I 4 **MATH 116** PTD 102B Painting/Decorating Apprentice IB 4 PTD 105B OSHA/First Aid/CPR ENGLISH COMPOSITION 3 ENG 101 or 102 or 107 PTD 151B Painting/Decorating Apprentice II 4 PTD 152B Painting/Decorating Apprentice IIB 4 COMMUNICATIONS 3 PTD 155B Respirators/Lead Abatement COM 101 or 215; or ENG 101 PTD 201B Painting/Decorating Apprentice III 4 **COMPUTING** 3 PTD 202B Painting/Decorating Apprentice IIIB 4 IS 101 PTD 205B Heavy Equipment Operation 1 **HUMAN RELATIONS** 3 PTD 255B COMET 1 ALS 101; ANTH 101, 112; HIST 105; PTD 270B OSHA 30 2 HMS 130; MGT 100B NATURAL SCIENCE AST 101: BIOL 101: CHEM 103: EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110 SOCIAL SCIENCE/HUMANITIES 3 ANTH 101: ART 160: ECON 102: MUS 121, 125; PHIL 102; PSY 101; SOC 101 **U.S. AND NEVADA CONSTITUTIONS** 4-6 PSC 101: or HIST 101 and HIST 102; or

## **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.



HIST 101 and HIST 217

# **Apprenticeship Studies**Painter Emphasis

REQUIRED CREDITS: 30 DEGREE CODE: PAINT-CT

#### 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)

### **SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)**

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS	3		PTD 101B	Painting/Decorating Apprentice I	4	
COM 101 or 215; or ENG 101			PTD 102B	Painting/Decorating Apprentice IB	4	
			PTD 105B	OSHA/First Aid/CPR	1	
			PTD 151B	Painting/Decorating Apprentice II	4	
			PTD 152B	Painting/Decorating Apprentice IIB	4	
			PTD 155B	Respirators/Lead Abatement	1	
			PTD 201B	Painting/Decorating Apprentice III	4	
			PTD 202B	Painting/Decorating Apprentice IIIB	4	
			PTD 205B	Heavy Equipment Operation	1	

Computation included in PTD 101B, 102B, 151B, 152B, 155B, 201B, 202B

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

- 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.



## Apprenticeship Studies Pile Driver Emphasis

**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 work place. 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)

#### SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

	CR	SEMESTER			CR	SEMESTER
<b>MATHEMATICS</b>	3		CPT 102B	Orientation	2	
MATH 116			CPT 104B	Safety and Health Certifications	2	
ENGLISH COMPOSITION	3		CPT 105B	Basic Wall Framing	1.5	
ENG 101 or 102 or 107			CPT 107B	Print Reading	2	
COMMUNICATIONS	3		CPT 115B	Transit Level/Laser	2	
COM 101 or 215; or ENG 101			CPT 129B	Advanced Print Reading	2	
INIMAN DEL ATIONO	2		CPT 137B	Rigging	2	
HUMAN RELATIONS ALS 101; ANTH 101, 112; HIST 105;	3		CPT 145B	Scaffold Erector Qualification	2	
HMS 130; MGT 100B			MWA 111B	Welding Fabrications A	1.5	
NATURAL SCIENCE	6-7		MWA 117B	Structural Welding - AWS A	1.5	
AST 101; BIOL 101; CHEM 103; ENV 101;	0-7		MWA 119B	Structural Welding - AWS B	1.5	
GEOG 103, 104; GEOL 100; PHYS 110			PDA 105B	Piles and Hammers A	1.5	
SOCIAL SCIENCE/HUMANITIES	3		PDA 107B	Piles and Hammers B	1.5	
ANTH 101; ART 160; ECON 102;	3		PDA 109B	Pile Caps and Columns A	1.5	
MUS 121, 125; PHIL 102; PSY 101;			PDA 111B	Pile Caps and Columns B	1.5	
SOC 101			PDA 113B	Falsework A	1.5	
U.S. AND NEVADA CONSTITUTIONS	4-6		PDA 115B	Falsework B	1.5	
PSC 101; or			PDA 117B	Abutments A	1.5	
HIST 101 <b>and</b> HIST 102; or HIST 101 <b>and</b> HIST 217			PDA 119B	Abutments B	1.5	
			PDA 121B	Bridge Deck Forms A	1.5	
			PDA 123B	Bridge Deck Forms B	1.5	

- 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 PDA journeyman course offered for credit may be substituted for any of the above PDA apprentice courses. Please contact the program coordinator for more
    - 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.



# **Apprenticeship Studies**Pile Driver Emphasis

**REQUIRED CREDITS: 31** 

DEGREE CODE: PDA-CT

#### 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)

#### SPECIAL PROGRAM REQUIREMENTS (28 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS	3		CPT 102B	Orientation	2	
COM 101 or 215; or ENG 101			CPT 104B	Safety and Health Certifications	2	
			CPT 107B	Print Reading	2	
			CPT 137B	Rigging	2	
			CPT 145B	Scaffold Erector Qualification	2	
			MWA 117B	Structural Welding - AWS A	1.5	
			MWA 119B	Structural Welding - AWS B	1.5	
			PDA 105B	Piles and Hammers A	1.5	
			PDA 107B	Piles and Hammers B	1.5	
			PDA 109B	Pile Caps and Columns A	1.5	
			PDA 111B	Pile Caps and Columns B	1.5	
			PDA 113B	Falsework A	1.5	
			PDA 115B	Falsework B	1.5	
			PDA 117B	Abutments A	1.5	
			PDA 119B	Abutments B	1.5	
			PDA 121B	Bridge Deck Forms A	1.5	
			PDA 123B	Bridge Deck Forms B	1.5	

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.



# **Apprenticeship Studies**Piping Trades Emphasis

**REQUIRED CREDITS: 60** 

DEGREE CODE: PPF-AAS

### 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)** SPECIAL PROGRAM REQUIREMENTS (32 CREDITS) CR **SEMESTER** CR **SEMESTER** MATHEMATICS PPF 151B Second Year Plumbers and Pipefitters 4 PPF 102B Apprentice I PPF 152B Second Year Plumbers and Pipefitters 4 **ENGLISH COMPOSITION** 3 Apprentice II ENG 101 or 102 or 107 PPF 201B Third Year Plumbers and Pipefitters 4 Apprentice I **COMMUNICATIONS** 3 COM 101 or 215; or ENG 101 PPF 202B Third Year Plumbers and Pipefitters Apprentice II **HUMAN RELATIONS** PPF 251B Fourth Year Plumbers and Pipefitters PPF 101B Apprentice I PPF 252B Fourth Year Plumbers and Pipefitters NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; Apprentice II EGG 131, 132; ENV 101; GEOG 103, 104; Fifth Year Plumbers and Pipefitters PPF 291B GEOL 100; PHYS 110 Apprentice I Fifth Year Plumbers and Pipefitters PPF 292B SOCIAL SCIENCE/HUMANITIES 3 Apprentice II ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101 **U.S. AND NEVADA CONSTITUTIONS** 4-6

## **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 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.



PSC 101: or

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

# **Apprenticeship Studies**Piping Trades Emphasis

REQUIRED CREDITS: 30 DEGREE CODE: PPF-CT

### 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.

#### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS) **GENERAL EDUCATION REQUIREMENTS (3 CREDITS)** CR SEMESTER CR SEMESTER COMMUNICATIONS 3 PPF 101B First Year Plumbers and Pipefitters 4 COM 101 or 215; or ENG 101 Apprentice I First Year Plumbers and Pipefitters PPF 102B Apprentice II PPF 116B Technical Math for Piping Trades 2 PPF 151B Second Year Plumbers and Pipefitters 4 Apprentice I PPF 152B Second Year Plumbers and Pipefitters Apprentice II OSHA 10 PPF 170B 0.5 PPF 201B 4 Third Year Plumbers and Pipefitters Apprentice I PPF 202B Third Year Plumbers and Pipefitters 4 Apprentice II PPF 240B First Aid/CPR 0.5 Computation included in PPF 101B, 102B, 116B Human Relations included in PPF 101B, 102B

- 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.



# **Apprenticeship Studies**Plasterer Emphasis

**REQUIRED CREDITS: 60** 

### DEGREE CODE: PLA-AAS

### **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)

### SPECIAL PROGRAM REQUIREMENTS (30 CREDITS)

	CR	SEMESTER		CR	SEMESTER
MATHEMATICS MATH 116	3		PLA 111B Plasterer Apprentice I PLA 112B Plasterer Apprentice IB	4 3	
ENGLISH COMPOSITION ENG 101 or 102 or 107	3		PLA 141B Plasterer Apprentice II PLA 142B Plasterer Apprentice IIB	3 4	
COMMUNICATIONS COM 101 or 215; or ENG 101	6		PLA 201B Plasterer Apprentice III PLA 202B Plasterer Apprentice IIIB	3 4	
HUMAN RELATIONS MGT 100B or PSY 101 or SOC 101	3		PLA 251B Plasterer Apprentice IV PLA 252B Plasterer Apprentice IVB	3 4	
NATURAL SCIENCE EGG 131 and 132	8		PLCM 270B OSHA 30	2	
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3				
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217	4-6				

- 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.



# **Apprenticeship Studies**Plasterer Emphasis

**REQUIRED CREDITS: 31** 

DEGREE CODE: PLA-CT

4

3

4

### 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.

**GENERAL EDUCATION REQUIREMENTS (3 CREDITS)** 

· 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.

#### CR SEMESTER CR SEMESTER PLA 111B Plasterer Apprentice I COMMUNICATIONS 3 4 COM 101 or 215; or ENG 101 PLA 112B Plasterer IB 3 3 PLA 141B Plasterer II PLA 142B Plasterer IIB 4 3 PLA 201B Plasterer Apprentice III

PLA 202B

PLA 251B

PLA 252B

Computation included in PLA 141B, 142B

Plasterer Apprentice IIIB

Plasterer Apprentice IV

Plasterer Apprentice IVB

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

SPECIAL PROGRAM REQUIREMENTS (28 CREDITS)

- 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.



# Apprenticeship Studies Reinforcing Ironworker Emphasis

REQUIRED CREDITS: 62 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 702-651-4163.

### 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)

### SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

	CR	SEMESTER			CR	SEMESTER
<b>MATHEMATICS</b>	3		IRW 110B	Introduction to Ironworking	2	
MATH 116			IRW 112B	Metal Buildings	3	
ENGLISH COMPOSITION	3		IRW 114B	Mixed Base for Ironworkers	3	
ENG 101 or 102 or 107			IRW 116B	Reinforcing Iron I	3	
COMMUNICATIONS	3		IRW 150B	Rigging for Ironworkers	3	
COM 101 or 215; or ENG 101	3		IRW 152B	Welding I for Ironworkers	3	
			IRW 154B	Reinforcing Iron II	3	
HUMAN RELATIONS MGT 100B	3		IRW 156B	Welding II for Ironworkers	3	
Mor roop			IRW 202B	Welding III for Ironworkers	3	
NATURAL SCIENCE	8		IRW 204B	Detailing I for Reinforcing Iron	3	
EGG 131 and 132			IRW 206B	Detailing II for Reinforcing Iron	3	
SOCIAL SCIENCE/HUMANITIES	3		IRW 208B	Foreman Training for Ironworkers	3	
ANTH 101; ART 160; ECON 102;						
MUS 121, 125; PHIL 102; PSY 101; SOC 101						
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or HIST 101 and HIST 217	4-6					

### $\underline{\text{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree.}$

- 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.



# Apprenticeship Studies Reinforcing Ironworker Emphasis

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.

**REQUIRED CREDITS: 38** 

Human Relations included in IRW 208B

### 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 CREDITS)

### SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS	3		IRW 110B	Introduction to Ironworking	2	
COM 101 or 215; or ENG 101			IRW 112B	Metal Buildings	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	3	
			IRW 154B	Reinforcing Iron II	3	
			IRW 156B	Welding II for Ironworkers	3	
			IRW 202B	Welding III for Ironworkers	3	
			IRW 204B	Detailing I for Reinforcing Iron	3	
			IRW 206B	Detailing II for Reinforcing Iron	3	
			IRW 208B	Foreman Training for Ironworkers	3	
			Computation	n included in IRW 114B, 204B		

- 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.



## **Apprenticeship Studies** Residential Emphasis

**REQUIRED CREDITS: 30 DEGREE CODE: ELRES-CT** 

### 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)**

### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

	CR	SEMESTER		CR	SEMESTER
COMMUNICATIONS	3		ELEC 115B Residential Apprentice I	4	
COM 101 or 215; or ENG 101			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.



# **Apprenticeship Studies**Roofer and Waterproofer Emphasis

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)

### SPECIAL PROGRAM REQUIREMENTS (32 CREDITS)

	CR	SEMESTER			CR	SEMESTER
<u>MATHEMATICS</u>	3		RFR 101B	Roofers Apprentice I	4	
MATH 116			RFR 102B	Roofers Apprentice I s	4	
ENGLISH COMPOSITION	3		RFR 151B	Roofers Apprentice II	4	
ENG 101 or 102 or 107			RFR 152B	Roofers Apprentice II s	4	
COMMUNICATIONS	3		RFR 201B	Roofers Apprentice III	4	
COM 101 or 215; or ENG 101	J		RFR 202B	Roofers Apprentice III s	4	
HUMAN RELATIONS	3		RFR 211B	Safety	4	
ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B; SOC 101	3		RFR 212B	CPR, First Aid, and OSHA 10	4	
NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110	7					
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3					
U.S. AND NEVADA CONSTITUTIONS HIST 101 and HIST 102; or HIST 101 and HIST 217	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 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.



# Apprenticeship Studies Roofer and Waterproofer Emphasis

REQUIRED CREDITS: 31 DEGREE CODE: ROOF-CT

### 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.

#### SPECIAL PROGRAM REQUIREMENTS (28 CREDITS) GENERAL EDUCATION REQUIREMENTS (3 CREDITS) CR SEMESTER CR SEMESTER 3 RFR 101B **COMMUNICATIONS** Roofers Apprentice I 4 COM 101 or 215; or ENG 101 RFR 102B Roofers Apprentice I s 4 RFR 151B Roofers Apprentice II RFR 152B Roofers Apprentice II s RFR 201B Roofers Apprentice III RFR 211B Safety 4 RFR 212B CPR, First Aid and OSHA 10

Computation included in RFR 102B Human Relations included in RFR 101B

- 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.



# **Apprenticeship Studies**Scaffold Erector Emphasis

REQUIRED CREDITS: 60 DEGREE CODE: SEA-AAS

### 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)**

### SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)

	CR	SEMESTER			CR	SEMESTER
<u>MATHEMATICS</u>	3		CORE REC	QUIREMENTS (27 credits)		
MATH 116			CPT 102B	Orientation	2	
ENGLISH COMPOSITION	3		CPT 104B	Safety and Health Certifications	2	
ENG 101 or 102 or 107			CPT 107B	Print Reading	2	
COMMUNICATIONS	3		CPT 129B	Advanced Print Reading	2	
COM 101 or 215; or ENG 101	3		SEA 105B	Basic Frame Scaffold	1.5	
	2		SEA 109B	Basic System Scaffold	1.5	
HUMAN RELATIONS ALS 101; ANTH 101, 112; HIST 105;	3		SEA 111B	Basic Suspended Scaffold	1.5	
HMS 130; MGT 100B			SEA 113B	Basic Tube and Clamp Scaffold	1.5	
NATIVE AL COMPACE	6-7		SEA 115B	Intermediate Frame Scaffold	1.5	
NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; ENV 101;	0-7		SEA 117B	Intermediate System Scaffold	1.5	
GEOG 103, 104; GEOL 100; PHYS 110			SEA 119B	Advanced Frame Scaffold	1.5	
SOCIAL SCIENCE/HUMANITIES	3		SEA 121B	Advanced System Scaffold	1.5	
ANTH 101; ART 160; ECON 102;	3		SEA 123B	Advanced Suspended Scaffold	1.5	
MUS 121, 125; PHIL 102; PSY 101;			SEA 125B	Scaffold Re-Shoring	2	
SOC 101			SEA 127B	Scaffold in Confined Spaces	1.5	
U.S. AND NEVADA CONSTITUTIONS	4-6		SEA 129B	Specialty Scaffold Applications	2	
PSC 101; or						
HIST 101 and HIST 102; or HIST 101 and HIST 217			CHOOSE I	ELECTIVES (8 credits)		
11101 101 11101 217			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.



## **Apprenticeship Studies** Scaffold Erector Emphasis

**REQUIRED CREDITS: 30** DEGREE CODE: SEA-CT

### 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)

### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS	3		CPT 102B	Orientation	2	
COM 101 or 215; or ENG 101			CPT 104B	Safety and Health Certifications	2	
			CPT 107B	Print Reading	2	
			CPT 129B	Advanced Print Reading	2	
			SEA 105B	Basic Frame Scaffold	1.5	
			SEA 109B	Basic System Scaffold	1.5	
			SEA 111B	Basic Suspended Scaffold	1.5	
			SEA 113B	Basic Tube and Clamp Scaffold	1.5	
			SEA 115B	Intermediate Frame Scaffold	1.5	
			SEA 117B	Intermediate System Scaffold	1.5	
			SEA 119B	Advanced Frame Scaffold	1.5	
			SEA 121B	Advanced System Scaffold	1.5	
			SEA 123B	Advanced Suspended Scaffold	1.5	
			SEA 125B	Scaffold Re-Shoring	2	
			SEA 127B	Scaffold in Confined Space	1.5	
			SEA 129B	Specialty Scaffold Applications	2	

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.



# **Apprenticeship Studies**Sheet Metal Emphasis

**REQUIRED CREDITS: 60** 

**DEGREE CODE: SHEMET-AAS** 

### 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):** SPECIAL PROGRAM REQUIREMENTS CONTINUED **SEMESTER** SEMESTER **Third Year:** MATHEMATICS SMTL 230B First Aid/CPR II 0.5 SMTL 124B **Choose 2 from the following in 1 discipline (8 credits):** SMTL 234B Architectural Sheet Metal I 4 ENGLISH COMPOSITION ENG 101 or 102 or 107 SMTL 236B Architectural Sheet Metal II SMTL 240B CAD/Detailing I 4 COMMUNICATIONS SMTL 241B CAD/Detailing II COM 101 or 215; or ENG 101 SMTL 242B TAB I HUMAN RELATIONS SMTL 243B TAB II SMTL 260B SMTL 244B Advanced Welding/Industrial I SMTL 245B Advanced Welding/Industrial II NATURAL SCIENCE SMTL 246B HVAC-R Equipment I SMTL 115B and one set of the following: SMTL 247B HVAC-R Equipment II AST 101 and 105; or BIOL 101; or CHEM 105 and 106; SMTL 248B Food Service Equipment or GEOG 103 and 104; or GEOL 100; or PHYS 110 Fabrication/Installation I SOCIAL SCIENCE/HUMANITIES 3 SMTL 249B Food Service Equipment 4 ANTH 101; ART 160; ECON 102; Fabrication/Installation II MUS 121, 125; PHIL 102; PSY 101; Fourth Year: SOC 101 Choose level III and level IV of the above chosen U.S. AND NEVADA CONSTITUTIONS 4-6 classes (8 credits): PSC 101: or SMTL 261B TAB III HIST 101 and HIST 102; or SMTL 262B TAB IV HIST 101 and HIST 217 SMTL 263B Advanced Welding/Industrial III SMTL 264B Advanced Welding/Industrial IV SPECIAL PROGRAM REQUIREMENTS (34 CREDITS) SMTL 265B HVAC-R Equipment III SEMESTER CR SMTL 266B HVAC-R Equipment IV SMTL 267B Food Service Equipment **First Year:** Fabrication/Installation III SMTL 111B First Aid/CPR I 0.5 SMTL 268B Food Service Equipment SMTL 113B Sheet Metal Drafting 4 Fabrication/Installation IV SMTL 114B Layout/Fabrication I 4 SMTL 269B CAD/Detailing III SMTL 121B OSHA 10 1 SMTL 270B CAD/Detailing IV Second Year: SMTL 284B Architectural Sheet Metal III 4 SMTL 122B Sheet Metal Plans and Specifications SMTL 285B Architectural Sheet Metal IV SMTL 123B Layout/Fabrication 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 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.



# **Apprenticeship Studies**Sheet Metal Emphasis

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.

### SPECIAL PROGRAM REQUIREMENTS (29 CREDITS) GENERAL EDUCATION REQUIREMENTS (3 CREDITS) CR SEMESTER CR SEMESTER **COMMUNICATIONS** 3 First Year: COM 101 or 215; or ENG 101 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 Second Year: SMTL 122B Sheet Metal Plans and Specifications SMTL 123B Layout/Fabrication II 4 SMTL 124B Sheet Metal Apprentice II Third Year: SMTL 230B First Aid/CPR II 0.5 CHOOSE ELECTIVES (4 credits) SMTL 234B Architectural Sheet Metal I SMTL 240B CAD/Detailing I SMTL 242B TAB I SMTL 244B Advanced Welding/Industrial I SMTL 246B HVAC-R Equipment I SMTL 248B Food Service Equipment Fabrication/Installation I

### **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.

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

- 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.



# **Apprenticeship Studies**Stationary Engineers Emphasis

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.

**REQUIRED CREDITS: 64** 

### 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)

### SPECIAL PROGRAM REQUIREMENTS (36 CREDITS)

	CR	SEMESTER		CR	SEMESTER
<u>MATHEMATICS</u>	3		OPME 102B Fundamentals of Electricity	3	
OPME 120B			OPME 103B Introduction to the National Electric Code	3	
ENGLISH COMPOSITION ENG 101 or 102 or 107	3		OPME 105B Domestic Refrigeration	2	
COMMUNICATIONS	3		OPME 106B Mechanical Power Transmission (Instrumentation)	3	
COM 101 or 215; or ENG 101			OPME 108B Fluid Power (Pneumatics, Hydraulics, Instrumentation)	3	
COMPUTING IS 101	3		OPME 110B Electrical, Heating and Cooling	4	
HUMAN RELATIONS	3		OPME 114B Automated Manufacturing Control	3	
OPME 123B	3		OPME 122B Introduction to Oxy-Acetylene Weldin	ng 3	
			OPME 133B Air Conditioning Theory	6	
NATURAL SCIENCE	6		OPME 144B Industrial Electricity	3	
OPME 107B <b>and</b> 109B			OPME 212 Welding I	3	
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3				
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or	4-6				

### $\underline{\text{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree.}$

- 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 more for 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.



HIST 101 and HIST 217

# Apprenticeship Studies Stationary Engineers Emphasis

REQUIRED CREDITS: **30** DEGREE CODE: **OPME-CT** 

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

Human Relations included in OPME 108B

### 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 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 (3 CREDITS) SPECIAL PROGRAM REQUIREMENTS (27 CREDITS) CR SEMESTER CR SEMESTER 3 **COMMUNICATIONS** OPME 102B Fundamentals of Electricity 3 COM 101 or 215; or ENG 101 OPME 103B Introduction to the National Electric Code 3 OPME 105B Domestic Refrigeration 2 OPME 106B Mechanical Power Transmission 3 (Instrumentation) OPME 107B Low Pressure Steam 3 OPME 108B Fluid Power (Pneumatics, 3 Hydraulics, Instrumentation) 3 OPME 109B High Pressure Steam OPME 110B Electrical, Heating and Cooling 4 OPME 114B Automated Manufacturing Control

 $\underline{\text{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree.}$ 

- 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 students who complete the Operating Maintenance Engineers Certificate of Achievement if they are affected by the retroactive six year rule.



# **Apprenticeship Studies**Structural Steel Ironworker Emphasis

DEGREE CODE: IRWSTL-AAS

### PROGRAM DESCRIPTION

This program prepares students for employment as a Journeyman Stationary and Maintenance Engineer. **This is a restricted entry program. Students MUST be** 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 702-651-4163.

**REQUIRED CREDITS: 65** 

### 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 (30 CREDITS)**

### **SPECIAL PROGRAM REQUIREMENTS (35 CREDITS)**

	CR	SEMESTER			CR	SEMESTER
MATHEMATICS	3		IRW 110B	Introduction to Ironworking	2	
MATH 116			IRW 111B	Introduction to Major Work Areas	2	
ENGLISH COMPOSITION	3		IRW 112B	Metal Buildings	3	
ENG 101 or 102 or 107			IRW 114B	Mixed Base for Ironworkers	3	
COMMUNICATIONS	3		IRW 134B	Lead Abatement/OSHA	2	
COM 101 or 215; or ENG 101	3		IRW 150B	Rigging for Ironworkers	3	
COMPUTING	2		IRW 152B	Welding I for Ironworkers	3	
COMPUTING IS 101	3		IRW 153B	Structural Steel I	3	
101			IRW 156B	Welding II for Ironworkers	3	
HUMAN RELATIONS MGT 100B	3		IRW 203B	Structural Steel II	3	
MGT 100B			IRW 207B	Structural Steel III/Precast	3	
NATURAL SCIENCE	8		IRW 208B	Foreman Training for Ironworkers	3	
EGG 131 and 132			IRW 211B	Architectural Ornamental Iron	2	
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3					
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or	4-6					

### **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 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.



HIST 101 and HIST 217

## Apprenticeship Studies Structural Steel Ironworker Emphasis

**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.

**REQUIRED CREDITS: 37** 

Human Relations included in IRW 208B

### 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 CREDITS)

### SPECIAL PROGRAM REQUIREMENTS (34 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS	3		IRW 110B	Introduction to Ironworking	2	
COM 101 or 215; or ENG 101			IRW 111B	Introduction to Major Work Areas	2	
			IRW 112B	Metal Buildings	3	
			IRW 114B	Mixed Base for Ironworkers	3	
			IRW 150B	Rigging for Ironworkers	3	
			IRW 152B	Welding I for Ironworkers	3	
			IRW 153B	Structural Steel I	3	
			IRW 156B	Welding II for Ironworkers	3	
			IRW 203B	Structural Steel II	3	
			IRW 205B	Ornamental Iron I	3	
			IRW 207B	Structural Steel III/Precast	3	
			IRW 208B	Foreman Training for Ironworkers	3	
			or IRW 209B	Ornamental Iron II		
			Computation	n included in IRW 114B, 205B		

- 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.



## **Apprenticeship Studies** Surveyors Emphasis

REQUIRED CREDITS: 60 DEGREE CODE: OPESUV-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)

### SPECIAL PROGRAM REQUIREMENTS (30 CREDITS)

	CR	SEMESTER			CR	SEMESTER
MATHEMATICS OPE 116B	5		OPE 101B	Introduction to Apprenticeship/Operation and Maintenance	5	
ENGLISH COMPOSITION	3		OPE 110B	Technical Sketching	5	
ENG 101 or 102 or 107	3		OPE 111B	Land Surveying	5	
	_		OPE 117B	Applied Math for Surveyors	5	
COMMUNICATIONS COM 101 or 215; or ENG 101	3		OPE 121B	Boundary Surveys	5	
COM 101 01 213, 01 21.0 101			OPE 122B	Construction Surveys	5	
HUMAN RELATIONS OPE 283B	5					
OFE 203B						
NATURAL SCIENCE	5					
OPE 201B						
SOCIAL SCIENCE/HUMANITIES	3					
ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101;						
SOC 101						
U.S. AND NEVADA CONSTITUTIONS	6					
HIST 101 and HIST 102; or	0					
HIST 101 and HIST 217						

 $\underline{\text{NOTE}} \ \bullet \ \text{Course numbers with the "B" suffix may be non-transferable for a NSHE baccalaureate degree.}$ 

- 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.



# **Apprenticeship Studies**Surveyors Emphasis

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.

**GENERAL EDUCATION REQUIREMENTS (3 CREDITS)** 

• 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.

#### CR SEMESTER CR SEMESTER **COMMUNICATIONS** 3 OPE 101B Introduction to Apprenticeship/Operation COM 101 or 215; or ENG 101 and Maintenance OPE 110B Technical Sketching 5 **OPE 111B** Land Surveying 5 OPE 116B Machinists/Surveyors Math 5 OPE 117B Applied Math for Surveyors 5 **OPE 270B** OSHA 30

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

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

- 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.



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### **Apprenticeship Studies**

**Teamster Convention Training Emphasis** 

#### **REQUIRED CREDITS: 61 DEGREE CODE: CONVEN-AAS**

SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

TMST 220B Advanced Installation and Dismantle

TMST 230B Lead Foreman Training

TMST 240B First Aid/CPR

TMST 260B Rigging

TMST 270B Scissor Lift

TMST 250B Condor Operating

#### 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.

**GENERAL EDUCATION REQUIREMENTS (34 CREDITS)** 

- · 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.

#### CR SEMESTER CR **SEMESTER** 3 TMST 100B OSHA General Industry Class **MATHEMATICS** 1 **MATH 116** TMST 120B Introduction to the Convention Industry 2 TMST 130B Beginning Decorating 2 ENGLISH COMPOSITION 6 ENG 101 or 102 or 107 TMST 140B Beginning Systems 1 2 TMST 150B Beginning Design and Repair COMMUNICATIONS 2 TMST 160B Beginning Installation and Dismantle COM 101 and 215 TMST 170B Forklift Theory 3 **HUMAN RELATIONS** 3 3 TMST 200B Advanced Forklift

SOCIAL SCIENCE/HUMANITIES ART 160; ECON 101; PHIL 102; PSY 101

U. HIST 101 and HIST 217

ALS 101; ANTH 101, 112; HIST 105;

AST 101; BIOL 101; CHEM 103;

EGG 131, 132; ENV 101; GEOG 103, 104;

HMS 130: MGT 100B:

NATURAL SCIENCE

GEOL 100; PHYS 110

SOC 101

J.S. AND NEVADA CONSTITUT	IONS	6	
HIST 101 and HIST 102; or			

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 contact the program coordinator for

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.



### **Apprenticeship Studies**

Teamster Convention Training Emphasis

### 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 CREDITS)** SPECIAL PROGRAM REQUIREMENTS (27 CREDITS) CR SEMESTER CR SEMESTER **COMMUNICATIONS** 3 TMST 100B OSHA General Industry Class COM 101 or 215; or ENG 101 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 TMST 220B Advanced Installation and Dismantle TMST 230B Lead Foreman Training TMST 240B First Aid/CPR TMST 250B Condor Operating 3 TMST 260B Rigging

Computation included in TMST 160B, 220B

TMST 270B Scissor Lift

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

- 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.



# **Apprenticeship Studies**Tile Setter Emphasis

REQUIRED 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 work place. 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)**

### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

	CR	SEMESTER			CR	SEMESTER
<u>MATHEMATICS</u>	3		TLS 101B	Tile Setter Apprentice I	4	
MATH 116			TLS 102B	Tile Setter Apprentice IB	4	
ENGLISH COMPOSITION	6		TLS 105B	OSHA/First Aid/CPR for Tile Setters	3	
ENG 101 or 102 or 107			TLS 151B	Tile Setter Apprentice II	4	
COMMUNICATIONS	6		TLS 152B	Tile Setter Apprentice IIB	4	
COM 101 or 215; or ENG 101			TLS 201B	Tile Setter Apprentice III	4	
HUMAN RELATIONS ALS 101; ANTH 101, 112; HIST 105; HMS 130; MGT 100B	3		TLS 202B	Tile Setter Apprentice IIIB	4	
NATURAL SCIENCE AST 101; BIOL 101; CHEM 103; EGG 131, 132; ENV 101; GEOG 103, 104; GEOL 100; PHYS 110	8					
SOCIAL SCIENCE/HUMANITIES ANTH 101; ART 160; ECON 102; MUS 121, 125; PHIL 102; PSY 101; SOC 101	3					
U.S. AND NEVADA CONSTITUTIONS PSC 101; or HIST 101 and HIST 102; or	4-6					

**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 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.



HIST 101 and HIST 217

## Apprenticeship Studies Tile Setter Emphasis

**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)**

### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS COM 101 or 215; or ENG 101	3		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 IIB	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.

