# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION BRICKLAYERS APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (33-35 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	6	
<b>ENGLISH</b> : ENG 101, 102, 107	6	
<b>HUMAN RELATIONS</b> ALS 101, ANTH 101, 112, HIST 105, HMS 130, MGT 100B	3	
MATHEMATICS: MATH 116	3	
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	4-6	

HIST 101 and HIST 102 or HIST 101 and HIST 217

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
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	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

60 BRCKTD-AAS Total Credits

# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION CARPENTRY

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (25-27 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	
ENGLISH: ENG 101, 102, 107	3	
<b>HUMAN RELATIONS:</b> ALS 101, ANTH 101, 112, HIST 105, HMS 130, MGT 100B	3	
MATHEMATICS: MATH 116	3	
SCIENCE: AST 101, BIOL 101, CHEM 103, ENV 101, GEOG 103,104, GEOL 100, PHYS 110	6-7	
SOCIAL SCIENCE/HUMANITIES: ANTH 101, ART 160, ECON 102, MUS 121, 125, PHIL 102, PSY 101, SOC 101	3	
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or HIST 101 and HIST 102 or HIST 101 and HIST 217	4-6	

#### SPECIAL PROGRAM REQUIREMENTS (35 Credits):

		CR	SEMESTER
CPT 102B	Orientation	2	
CPT 104B	Safety and Health Certifications	2	
CPT 105B	Basic Wall Framing	1.5	
CPT 107B	Print Reading	2	
CPT 109B	Basic Roof Framing	1.5	
CPT 111B	Wall Forming	1.5	
CPT 113B	Doors and Door Frames	1.5	
CPT 115B	Transit Level/Laser	2	
CPT 117B	Foundations and Flat Work	1.5	
CPT 119B	Bridge Construction	1.5	
CPT 121B	Stair and Ramp Forming	1.5	
CPT 123B	Beam and Deck Forming	1.5	
CPT 125B	Cabinet Millwork and Assembly	1.5	
CPT 127B	Commercial Floor Framing	1.5	
CPT 129B	Advanced Print Reading	2	
CPT 131B	Cabinet Installation	2	
Plus eight (8	3) credits from the following:		
CPT 133B	Moldings and Trim	1.5	
CPT 135B	Tilt-Up Panel Construction	1.5	
CPT 137B	Rigging	2	
CPT 141B	Basic Metal Framing	1.5	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

Door and Door Hardware

Scaffold Erector Qualification

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

1.5

2



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.

**CPT 143B** 

**CPT 145B** 

# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION CEMENT MASON APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (30-32 Credits):**

#### CR SEMESTER **COMMUNICATIONS:** 6 COM 101, 215, ENG 101 **ENGLISH:** 3 ENG 101, 102, 107 **HUMAN RELATIONS:** 3 MGT 100B, PSY 101, SOC 101 3 **MATHEMATICS:** MATH 116 SCIENCE: 8 EGG 131, 132 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

HIST 101 and HIST 217

#### SPECIAL PROGRAM REQUIREMENTS (30 Credits):

		CR	SEMESTER
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	
<b>PLCM 270B</b>	OSHA 30	2	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

CEMENT-AAS Total Credits

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (25-29 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	
<b>ENGLISH:</b> ENG 101, 102, 107	3	
<b>HUMAN RELATIONS:</b> ALS 101, ANTH 101, 112, HIST 105, HMS 130, MGT 100B	3	
MATHEMATICS: MATH 116	3	
SCIENCE: AST 101, BIOL 101, CHEM 103, ENV 101, GEOG 103, 104, GEOL 100, PHYS 110	6-7	
SOCIAL SCIENCE/HUMANITIES: ANTH 101, ART 160, ECON 102, MUS 121, 125, PHIL 102, PSY 101, SOC 101	3	
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or HIST 101 and HIST 102 or	4-6	

HIST 101 and HIST 217

SPECIAL PROGRAM REQUIREMENTS (35 Credits):

		CR	SEMESTER
CPT 102B	Orientation	2	
CPT 104B	Safety and Health Certifications	2	
CPT 107B	Print Reading	2	
CPT 113B	Door and Door Frames	1.5	
CPT 129B	Advanced Print Reading	2	
DWA 105B	Basic Metal Framing	1.5	
DWA 109B	Basic Lathing	1.5	
DWA 111B	Drywall Application	1.5	
DWA 113B	Drywall Application/Finish Trims	1.5	
DWA 115B	Framing Ceilings and 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	

#### Plus a minimum of eight (8) credits from following:

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

Students may elect to graduate using the degree requirements in effect at the time of graduation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

60 DWA-AAS Total Credits

# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION ENVTL./CONSTRUCTION LABORER APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- · 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.

# **GENERAL EDUCATION REQUIREMENTS (27-29 Credits):**

Continued from previous column.

		CR	SEMESTER	J	om previous commi.	CR	SEMESTER
COMMINI	CATTONIC			APP 122B	Oxyfuel Gas Cutting	4	
COMMUNI COM 101 2	CATIONS: 15, ENG 101	3		APP 123B	Blueprint Reading for Laborers	3	
ENGLISH:	13, 1110 101	3		APP 128B	Asphalt	2	
ENG 101, 10	02. 107	3		APP 130B	Hazardous Waste	4	
	ELATIONS:	3			Handling for Laborers		
	NTH 101, 112, HIST 105,	3		APP 132B	Radiation	1	
HMS 130, M				APP 134B	Lead Abatement	2	
MATHEMA	TICS:	3		APP 136B	Asbestos Abatement	2	
MATH 116				APP 137B	Pipe Laying (Gravity Flow)	2	
CIENCE:		8		APP 139B	Pipe Laying (Pressurized)	2	
AST 101, BI	OL 101, CHEM 103,			APP 140B	Scaffold Building	2	
	32, ENV 101, GEOG 103, 104,			APP 142B	Forklift Operations and Awareness	1	
GEOL 100, I SOCIAL SO	PHYS 110 CIENCE/HUMANITIES:	3		APP 144B	Operation of Motor Driven Power Equipment	1	
ANTH 101, A PHIL 102, P	ART 160, ECON 101, MUS 121, 13 SY 101, SOC 101	25,		APP 146B	Operation of Concrete Core Drilling, Saw Cutting and Compaction Equipment	1	
	EVADA CONSTITUTIONS:	4-6		APP 150B	Mason Tending (Trowel)	2	
PSC 101 or	d HIST 102 or			APP 152B	Plaster Tending (Mixing)	2	
HIST 101 an	d HIST 217	/77 C:-	a dika).	APP 160B	Miners Preparedness and Awareness	4	
SPECIAL I	PROGRAM REQUIREMENTS	(33 Cr	eaits):	APP 162B	Drilling and Blasting	4	
		CR	SEMESTER	APP 164B	Pneumatic Air Tool Handling	2	
				APP 166B	Mine Rescue	1	
APP 102B	Introduction to Apprentice Craft	4		APP 168B	Microbial Remediation	1	
APP 104B	General Construction	4		<b>APP 200B</b>	OSHA for Laborers	2	
APP 105B	Concrete Flat Work	2		<b>APP 212B</b>	Foreman Preparedness	2	
APP 107B	Concrete Walls and Columns Woo			APP 263B	Weatherization Installation Technician	5	
APP 127B	Rigging and Signaling	2	<del></del>	<b>APP 266B</b>	Weatherization Supervisor	3	
Plus ninetee	n (19) credits from the following:			APP 269B	Weatherization Energy Auditor	3	
APP 108B	Body Mechanics and Fall Protection	1					
APP 120B	Confined Space Awareness	2		Any APP io	urneyman course offered for credit ma	ay be s	ubstituted for
APP 120B APP 121B	Line and Grade	4		any of the al	pove APP apprentice courses. Please of for more details.		

Continued in next column.

Students may elect to graduate using the degree requirements in effect at the time of graduation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

60 LBCONT-AAS Total Credits

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (25 Credits):**

#### SPECIAL PROGRAM REQUIREMENTS (35 Credits):

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3		OPE 101B	Introduction to Apprenticeship/Operation	5	
<b>ENGLISH</b> : ENG 101, 102, 107	3		OPE 153B	and Maintenance Grade Checking I	5	
HUMAN RELATIONS:	3		OPE 155B	Plan Reading/Grade Checking II	5	
ALS 101, ANTH 101, 112, HIST 105, HMS 130, MGT 100B			OPE 157B	Specialized Equipment	5	
MATHEMATICS:	3		OPE 159B	Cranes	5	
MATHEMATICS. MATH 116	3		OPE 201B	Hazardous Materials	5	
SCIENCE:	6			Handling Awareness		
AST 101, BIOL 101, CHEM 103, EGG 131, 132, ENV 101, GEOG 103, 104,			Plus one (1) of the following:			
GEOL 100, PHYS 110			OPE 108B	Hydraulics	5	
SOCIAL SCIENCE/HUMANITIES:	3		OPE 212B	Welding	5	
ANTH 101, ART 160, ECON 102, MUS 121, 125, PHIL 102, PSY 101, SOC 101			OPE 214B	Heavy Equipment Repair	5	
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or HIST 101 and HIST 102 or HIST 101 and HIST 217	4-6			ourneyman classes offered redit (credit may vary).		

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION FLOOR COVERER APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (33 Credits):**

#### CR **SEMESTER COMMUNICATIONS:** 3 COM 101, 215, ENG 101 **COMPUTING:** 3 IS 101 **ENGLISH**: 3 ENG 101, 102, 107 3 **HUMAN RELATIONS:** ALS 101, ANTH 101, 112, HIST 105 HMS 130, MGT 100B, SOC 101 MATHEMATICS: 3 MATH 116 SCIENCE: 8 AST 101, BIOL 101, CHEM 103, EGG 131, 132, ENV 101, GEOG 103, 104, GEOL 100, PHYS 110 **SOCIAL SCIENCE/HUMANITIES:** 6 ANTH 101, ART 101, 102, 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

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 217

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

60 FLOOR-AAS Total Credits

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (25 Credits):**

# SPECIAL PROGRAM REQUIREMENTS (35 Credits):

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3		OPE 201B	Hazardous Materials Handling Awareness	5	
<b>ENGLISH:</b> ENG 101, 102, 107	3		OPE 202B	Soils Inspection and Testing	5	
HUMAN RELATIONS: ALS 101, ANTH 101, 112, HIST 105,	3		OPE 204B	Reinforced Concrete Inspector	5	
HMS 130, MGT 100B			OPE 206B	Pre-Stressed Concrete Inspector	5	
MATHEMATICS: MATH 116	3		OPE 208B	Structural Masonry Inspector	5	
SCIENCE: AST 101, BIOL 101, CHEM 103, FNV 101, GEOG 103, 104	6		Plus two (2)	of the following:		
ENV 101, GEOG 103, 104, GEOL 100, PHYS 110			OPE 209B	General Construction Inspector	5	
SOCIAL SCIENCE/HUMANITIES: ANTH 101, ART 160, ECON 102,	3		OPE 211B	Spray Applied Fire Proofing Inspector	5	
MUS 121, 125, PHIL 102, PSY 101, SOC 101			OPE 213B	Structural Steel and Bolting Inspector	5	
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or	4-6					

Students may elect to graduate using the degree requirements in effect at the time of graduation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 102 or HIST 101 and HIST 217

> 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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

OPECONSAAS Total Credits

# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION GLAZIER APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (27 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	
ENGLISH: ENG 101, 107	3	
<b>HUMAN RELATIONS:</b> ALS 101, ANTH 101, 112, HIST 105 HMS 130, MGT 100B	3	
MATHEMATICS: MATH 116	3	
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	

# **SPECIAL PROGRAM REQUIREMENTS (33 Credits):**

		CR	SEMESTER
GLZR 111B	Glazier I	5	
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 141B	Glazier VII	5	
GLZR 142B	Glazier VIII	3	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 217

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

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

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# APPRENTICESHIP STUDIES - HEAT AND FROST INSULATOR EMPHASIS

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION HEAT AND FROST INSULATOR APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (25-27 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	
<b>ENGLISH</b> : ENG 101, 102, 107	3	
<b>HUMAN RELATIONS</b> : ALS 101, ANTH 101, 112, HIST 105, HMS 130, MGT 100B	3	
MATHEMATICS: MATH 116	3	
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	4-6	

# SPECIAL PROGRAM REQUIREMENTS (35 Credits):

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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 217

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION OPERATING ENGINEER

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (25 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	
<b>ENGLISH</b> : ENG 101, 102, 107	3	
HUMAN RELATIONS: ALS 101, ANTH 101, 112, HIST 105 HMS 130, MGT 100B	3	
MATHEMATICS: MATH 116	3	
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	4-6	

### **SPECIAL PROGRAM REQUIREMENTS (35 Credits):**

	CR	SEMESTER
troduction to pprenticeship/Operation d Maintenance	5	
ydraulics	5	
lueprint Reading r Welders/Machinists	5	
azardous Materials andling Awareness	5	
iesel and High ompression Engines	5	
elding	5	
eavy Equipment Repair	5	
	ydraulics ueprint Reading r Welders/Machinists azardous Materials andling Awareness iesel and High ompression Engines	ydraulics 5 ueprint Reading 5 r Welders/Machinists azardous Materials 5 andling Awareness desel and High 5 mpression Engines felding 5

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 217

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

60 OPERPR-AAS Total Credits

# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION ELECTRICAL APPRENTICE

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 I.B.E.W. 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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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 I.B.E.W. and the Clark County Building Department.

# **GENERAL EDUCATION REQUIREMENTS (28 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	
<b>ENGLISH</b> : ENG 101, 102, 107	3	
HUMAN RELATIONS: ELEC 150B	4	
MATHEMATICS: ELEC 121B	4	
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: PSC 101 or	4-6	

### SPECIAL PROGRAM REQUIREMENTS (32 Credits):

		CR	SEMESTER
ELEC 111B	Electrical Apprentice I	4	
ELEC 112B	Electrical Apprentice II	4	
ELEC 122B	Electrical Apprentice IV	4	
ELEC 131B	Electrical Apprentice V	4	
ELEC 132B	Electrical Apprentice VI	4	
ELEC 141B	Electrical Apprentice VII	4	
ELEC 142B	Electrical Apprentice VIII	4	
ELEC 152B	Electrical Apprentice X	4	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 102 or HIST 101 and HIST 217

> 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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION OPERATING ENGINEER

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (30 Credits):**

#### CR **SEMESTER COMMUNICATIONS:** 3 COM 101, 215, ENG 101 ENGLISH: 3 ENG 101, 102, 107 **HUMAN RELATIONS:** 5 **OPE 101B** 5 **MATHEMATICS: OPE 116B** 5 SCIENCE: **OPE 260B 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 HIST 101 and HIST 217

#### **SPECIAL PROGRAM REQUIREMENTS (30 Credits):**

		CR	SEMESTER
OPE 105B	Machine Tools I	5	
OPE 110B	Technical Sketching	5	
OPE 124B	Blueprint Reading for Welders/Machinists	5	
OPE 131B	Introduction to Computer Aided Drafting	5	
OPE 201B	Hazardous Materials Handling Awareness	5	
OPE 212B	Welding	5	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree. OPEMACHAS



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION MILLWRIGHT APPRENTICE

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 651-4163.

## STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (25-29 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	
<b>ENGLISH:</b> ENG 101, 102, 107	3	
HUMAN RELATIONS: ALS 101, ANTH 101, 112, HIST 105, HMS 130, MGT 100B	3	
MATHEMATICS: MATH 116	3	
SCIENCE: AST 101, BIOL 101, CHEM 103, ENV 101, GEOG 103, 104, GEOL 100, PHYS 110	6-7	
SOCIAL SCIENCE/HUMANITIES: ANTH 101, ART 160, ECON 102, MUS 121, 125, PHIL 102, PSY 101, SOC 101	3	
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or HIST 101 and HIST 102 or HIST 101 and HIST 217	4-6	

Continued from previous column.

		CR	SEMESTER
MWA 109B	Cutting and Burning	1.5	
MWA 111B	Welding Fabrication A	1.5	
MWA 113B	Optics and Machinery Alignment	1.5	
MWA 115B	Machinery Shaft Alignment	1.5	
MWA 117B	Structural Welding - AWS A	1.5	
MWA 119B	Structural Welding - AWS B	1.5	
MWA 121B	Turbine Familiarization	1.5	
MWA 125B	Pumps	1.5	
MWA 127B	Turbine Maintenance	1.5	
MWA 129B	Conveyor Systems	1.5	
MWA 131B	Drives, Pulleys and Belts	1.5	
MWA 133B	Compressor Theory and Maintenance	1.5	
MWA 135B	Machinery Installation and Erection A	1.5	
MWA 137B	Machinery Installation and Erection B	1.5	

# SPECIAL PROGRAM REQUIREMENTS (36 Credits):

		CR	SEMESTER	Plus a minim
CPT 102B	Orientation	2		CPT 115B
CPT 104B	Safety and Health Certifications	2		CPT 129B
<b>CPT 107B</b>	Print Reading	2		CPT 145B
CPT 137B	Rigging	2		DWA 131B
MWA 105B	Millwright General Skills A	1.5		
MWA 107B	Millwright General Skills B	1.5		

mum of four (4) credits from following:

CPT 115B	Transit Level/Laser	2	
CPT 129B	Advanced Print Reading	2	
CPT 145B	Scaffold Erector Qualification	2	
DWA 131B	Light Gage Welding - AWS	2	

Continued in next column.

Students may elect to graduate using the degree requirements in effect at the time of graduation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION OPERATING ENGINEER

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (30 Credits):**

#### SPECIAL PROGRAM REQUIREMENTS (30 Credits):

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3		OPE 101B	Introduction to Apprenticeship/Operation	5	
<b>COMPUTING:</b> CIT 100B, 102B, 103B, 106B, 107B, 108B,	1		OPE 173B	and Maintenance Drilling I	5	
109B			OPE 175B	Drilling II	5	
ENGLISH: ENG 101, 102, 107	3		OPE 177B	Drilling III	5	
HUMAN RELATIONS: ALS 101, ANTH 101, 112, HIST 105, HMS 130, MGT 100B	3		OPE 201B	Hazardous Materials Handling Awareness	5	
MATHEMATICS:	3		Plus one (1)	of the following:		
MATH 116			OPE 157B	Specialized Equipment	5	
SCIENCE:	8		OPE 212B	Welding	5	
AST 101, BIOL 101, CHEM 103, EGG 131, 132, ENV 101, GEOG 103, 104, GEOL 100, PHYS 110			OPE 214B	Heavy Equipment Repair	5	
SOCIAL SCIENCE/HUMANITIES: ANTH 101, ART 160, ECON 102, MUS 121, 125, PHIL 102, PSY 101, SOC 101	3			ourneyman classes offered for it (credit may vary).		
U.S. AND NEVADA CONSTITUTIONS: HIST 101 and HIST 102 or HIST 101 and HIST 217	6					

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION PAINTER APPRENTICE

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 651-4163.

#### STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (30 Credits):**

	CR	SEMESTER		
COMMUNICATIONS: COM 101, 215, ENG 101	3			
COMPUTING: IS 101	3			
<b>ENGLISH</b> : ENG 101, 102, 107	3			
<b>HUMAN RELATIONS:</b> ALS 101, ANTH 101, 112, HIST 105, HMS 130, MGT 100B	3			
MATHEMATICS: MATH 116	3			
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	4-6			

#### SPECIAL PROGRAM REQUIREMENTS (30 Credits):

		CR	SEMESTER
PTD 101B	Painting/Decorating Apprentice I	4	
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	
PTD 255B	COMET	1	
PTD 270B	OSHA 30	2	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 102 or HIST 101 and HIST 217

> 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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION PILE DRIVER APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- · 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.

# **GENERAL EDUCATION REQUIREMENTS (25-27 Credits):**

SPECIAL	PROGRAM	REQUIREMENTS	(35	Credits):

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

PDA 123B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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

Bridge Deck Forms A

Bridge Deck Forms B

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

1.5 1.5



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION PIPING TRADES APPRENTICE

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 651-4163.

#### STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

SPECIAL PROGRAM REQUIREMENTS (32 Credits):

#### **GENERAL EDUCATION REQUIREMENTS (28 Credits):**

					•	
	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3		PPF 151B	Second Year Plumbers and Pipefitters Apprentice I	4	
<b>ENGLISH</b> : ENG 101, 102, 107	3		PPF 152B	Second Year Plumbers and Pipefitters Apprentice II	4	
HUMAN RELATIONS:: PPF 101B	4		PPF 201B	Third Year Plumbers and Pipefitters Apprentice I	4	
MATHEMATICS: PPF 102B	4		PPF 202B	Third Year Plumbers and Pipefitters Apprentice II	4	
SCIENCE: AST 101, BIOL 101, CHEM 103,	7		PPF 251B	Fourth Year Plumbers and Pipefitters Apprentice I	4	
EGG 131, 132, ENV 101, GEOG 103, 104, GEOL 100, PHYS 110			PPF 252B	Fourth Year Plumbers and Pipefitters Apprentice II	4	
SOCIAL SCIENCE/HUMANITIES: ANTH 101, ART 160, ECON 102, MUS 121, 125, PHIL 102, PSY 101, SOC 101	3		PPF 291B	Fifth Year Plumbers and Pipefitters Apprentice I	4	
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or	4-6		PPF 292B	Fifth Year Plumbers and Pipefitters Apprentice II	4	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 102 or HIST 101 and HIST 217

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

PPF-AAS Total Credits

# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION PLASTERER APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (30-32 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	6	
<b>ENGLISH</b> : ENG 101, 102, 107	3	
HUMAN RELATIONS: MGT 100B, PSY 101, SOC 101	3	
MATHEMATICS: MATH 116	3	
<b>SCIENCE</b> : EGG 131, 132	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	

#### SPECIAL PROGRAM REQUIREMENTS (30 Credits):

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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION REINFORCING IRONWORKER APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

SPECIAL PROGRAM REQUIREMENTS (35 Credits):

#### **GENERAL EDUCATION REQUIREMENTS (27-29 Credits):**

					•	
	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS:	3		IRW 110B	Introduction to Ironworking	2	
COM 101, 215, ENG 101			IRW 112B	Metal Buildings	3	
<b>ENGLISH</b> : ENG 101, 102, 107	3		IRW 114B	Mixed Base for Ironworkers	3	
HUMAN RELATIONS:	3		IRW 116B	Reinforcing Iron I	3	
MGT 100B			IRW 150B	Rigging for Ironworkers	3	
MATHEMATICS:	3		IRW 152B	Welding I for Ironworkers	3	
MATH 116			IRW 154B	Reinforcing Iron II	3	
<b>SCIENCE</b> : EGG 131, 132	8		IRW 156B	Welding II for Ironworkers	3	
SOCIAL SCIENCE/HUMANITIES:	3		IRW 202B	Welding III for Ironworkers	3	
ANTH 101, ART 160, ECON 102,	3		IRW 204B	Detailing I for Reinforcing Iron	3	
MUS 121, 125, PHIL 102, PSY 101, SOC 101			IRW 206B	Detailing II for Reinforcing Iron	1 3	
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or	4-6		IRW 208B	Foreman Training for Ironworke	ers 3	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 102 or HIST 101 and HIST 217

> 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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION ROOFER AND WATERPROOFER APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (28 Credits):**

# CR **SEMESTER COMMUNICATIONS:** 3 COM 101, 215, ENG 101 ENGLISH: 3 ENG 101, 102, 107 **HUMAN RELATIONS:** 3 ALS 101, ANTH 101, 112, HIST 105 HMS 130, MGT 100B, SOC 101 **MATHEMATICS**: 3 MATH 116 SCIENCE: 7 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: HIST 101 and HIST 102 or

#### SPECIAL PROGRAM REQUIREMENTS (32 Credits):

		CR	SEMESTER
RFR 101B	Roofers Apprentice I	4	
RFR 102B	Roofers Apprentice I s	4	
RFR 151B	Roofers Apprentice II	4	
RFR 152B	Roofers Apprentice II s	4	
RFR 201B	Roofers Apprentice III	4	
RFR 202B	Roofers Apprentice III s	4	
RFR 211B	Safety	4	
RFR 212B	CPR, First Aid, and OSHA 10	4	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 217

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION SCAFFOLD ERECTOR APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (25-29 Credits):**

GENERAL EDUCATION REQUIREMENTS (25-29 Credits):		SPECIAL PROGRAM REQUIREMENTS (35 Credits):				
	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS:	3		CPT 102B	Orientation	2	
COM 101, 215, ENG 101			<b>CPT 104B</b>	Safety and Health Certifications	2	
ENGLISH: ENG 101, 102, 107	3		CPT 107B	Print Reading	2	
HUMAN RELATIONS:	3		CPT 129B	Advanced Print Reading	2	
ALS 101, ANTH 101, 112, HIST 105,	3		SEA 105B	Basic Frame Scaffold	1.5	
HMS 130, MGT 100B			SEA 109B	Basic System Scaffold	1.5	
MATHEMATICS: MATH 116	3		SEA 111B	Basic Suspended Scaffold	1.5	
SCIENCE:	6-7		SEA 113B	Basic Tube and Clamp Scaffold	1.5	
AST 101, BIOL 101, CHEM 103, ENV 101,	0-7		SEA 115B	Intermediate Frame Scaffold	1.5	
GEOG 103,104, GEOL 100, PHYS 110			<b>SEA 117B</b>	Intermediate System Scaffold	1.5	
SOCIAL SCIENCE/HUMANITIES: ANTH 101, ART 160, ECON 102,	3		SEA 119B	Advanced Frame Scaffold	1.5	
MUS 121, 125, PHIL 102, PSY 101, SOC 101			<b>SEA 121B</b>	Advanced System Scaffold	1.5	
U.S. AND NEVADA CONSTITUTIONS:	4-6		SEA 123B	Advanced Suspended Scaffold	1.5	
PSC 101 or HIST 101 and HIST 102 or			SEA 125B	Scaffold Re-Shoring	2	
HIST 101 and HIST 217			SEA 127B	Scaffold in Confined Spaces	1.5	
			SEA 129B	Specialty Scaffold Applications	2	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

Plus a minimum of eight (8) credits from the following:

**Basic Wall Framing** 

Transit Level/Laser

Stair and Ramp Forming

Scaffold Erector Qualification

Wall Forming

Rigging

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

1.5

1.5

2

1.5

2

2

60 SEA-AAS Total Credits

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.

CPT 105B

CPT 111B

CPT 115B

**CPT 121B** 

**CPT 137B** 

CPT 145B

**SEMESTER** 

# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION SHEET METAL APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (26 Credits):**

CR	SEMESTER
3	
3	
2	
4	
7-8	
3	
4-6	
	3 3 2 4 7-8

#### SPECIAL PROGRAM REQUIREMENTS (34 Credits):

		CR	SEMESTER
First Year:			
SMTL 111B	First Aid/CPR I	0.5	
SMTL 113B	Sheet Metal Drafting	4	
SMTL 114B	Layout/Fabrication I	4	
SMTL 121B	OSHA 10	1	
Second Year:			
SMTL 122B	Sheet Metal	4	
SMTL 123B	Plans and Specifications Layout/Fabrication II	4	
	•		

Continued in next column.

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

Continued from previous column.

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

CR

4

4

# Choose two (2) of the following courses in one discipline:

SMTL 234B	Architectural Sheet Metal I	4	
<b>SMTL 236B</b>	Architectural Sheet Metal II	4	
<b>SMTL 240B</b>	CAD/Detailing I	4	
<b>SMTL 241B</b>	CAD/Detailing II	4	
<b>SMTL 242B</b>	TAB I	4	
SMTL 243B	TAB II	4	
<b>SMTL 244B</b>	Advanced Welding/Industrial I	4	
<b>SMTL 245B</b>	Advanced Welding/Industrial II	4	
<b>SMTL 246B</b>	HVAC-R Equipment I	4	
<b>SMTL 247B</b>	HVAC-R Equipment II	4	
<b>SMTL 248B</b>	Food Service Equipment	4	
	Fabrication/Installation I		
<b>SMTL 249B</b>	Food Service Equipment	4	
	Fabrication/Installation II		

#### Fourth Year:

SMTL 261B TAB III SMTL 262B TAB IV

# Choose level III and level IV of the above chosen classes:

SMTL 263B Advanced Welding/Industrial III

SMTL 264B	Advanced Welding/Industrial IV	4	
SMTL 265B	HVAC-R Equipment III	4	
SMTL 266B	HVAC-R Equipment IV	4	
<b>SMTL 267B</b>	Food Service Equipment	4	
	Fabrication/Installation III		
<b>SMTL 268B</b>	Food Service Equipment	4	
	Fabrication/Installation IV		
SMTL 269B	CAD/Detailing III	4	
<b>SMTL 270B</b>	CAD/Detailing IV	4	
SMTL 284B	Architectural Sheet Metal III	4	
SMTL 285B	Architectural Sheet Metal IV	4	

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (28 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	
COMPUTING: IS 101	3	
<b>ENGLISH</b> : ENG 101, 102, 107	3	
HUMAN RELATIONS: OPME 123B	3	
MATHEMATICS: OPME 120B	3	
SCIENCE: OPME 107B, 109B	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	4-6	

# **SPECIAL PROGRAM REQUIREMENTS (36 Credits):**

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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 217

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

OPME-AAS

**64** Total Credits

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION STRUCTURAL STEEL IRONWORKER APPRENTICE

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

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- Comprehend and utilize all applicable Structural Steel Ironworker
- 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.

#### **GENERAL EDUCATION REQUIREMENTS (30-32 Credits):**

# SPECIAL PROGRAM REQUIREMENTS (35 Credits):

	CR	SEMESTER			CR	SEMESTER
COMMUNICATIONS:	3		IRW 110B	Introduction to Ironworking	2	
COM 101, 215, ENG 101			IRW 111B	Introduction to Major Work Areas	2	
COMPUTING: IS 101	3		IRW 112B	Metal Buildings	3	
ENGLISH:	3		IRW 114B	Mixed Base for Ironworkers	3	
ENG 101, 102, 107	3		IRW 134B	Lead Abatement/OSHA	2	
HUMAN RELATIONS:	3		IRW 150B	Rigging for Ironworkers	3	
MGT 100B			IRW 152B	Welding I for Ironworkers	3	
MATHEMATICS: MATH 116	3		IRW 153B	Structural Steel I	3	
SCIENCE:	8		IRW 156B	Welding II for Ironworkers	3	
EGG 131, 132	0		IRW 203B	Structural Steel II	3	
SOCIAL SCIENCE/HUMANITIES:	3		IRW 207B	Structural Steel III/Precast	3	
ANTH 101, ART 160, ECON 102, MUS 121, 125, PHIL 102, PSY 101, SOC 101			IRW 208B	Foreman Training for Ironworkers	3	
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or	4-6		IRW 211B	Architectural Ornamental Iron	2	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 102 or HIST 101 and HIST 217

> 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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION OPERATING ENGINEER

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 651-4163.

#### STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (30 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	
<b>ENGLISH</b> : ENG 101, 102, 107	3	
HUMAN RELATIONS: OPE 283B	5	
MATHEMATICS: OPE 116B	5	
SCIENCE: OPE 201B	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	6	

HIST 101 and HIST 217

#### SPECIAL PROGRAM REQUIREMENTS (30 Credits):

		CR	SEMESTER
OPE 101B	Introduction to Apprenticeship/Operation and Maintenance	5	
OPE 110B	Technical Sketching	5	
OPE 111B	Land Surveying	5	
OPE 117B	Applied Math for Surveyors	5	
OPE 121B	Boundary Surveys	5	
OPE 122B	Construction Surveys	5	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION CONVENTION TEAMSTER APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

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

#### **GENERAL EDUCATION REQUIREMENTS (34 Credits):**

#### SPECIAL PROGRAM REQUIREMENTS (26 Credits):

	CR	SEMESTER		CR	SEMESTER
COMMUNICATIONS:	6		TMST 100B OSHA General Industry C	lass 1	
COM 101, 215			TMST 120B Introduction to the	1	
ENGLISH:	6		Convention Industry		
ENG 101, 102, 107			TMST 130B Beginning Decorating	2	
HUMAN RELATIONS: ALS 101, ANTH 101, 112, HIST 105	3		TMST 140B Beginning Systems	1	
HMS 130, MGT 100B, SOC 101			TMST 150B Beginning Design and Rep	pair 2	
MATHEMATICS: MATH 116	3		TMST 160B Beginning Installation and Dismantle	2	
SCIENCE:	7		TMST 170B Forklift Theory	3	
AST 101, BIOL 101, CHEM 103, EGG 131, 132, ENV 101, GEOG 103, 104			TMST 200B Advanced Forklift	3	
GEOL 100, PHYS 110			TMST 220B Advanced Installation	3	
SOCIAL SCIENCE/HUMANITIES:	3		and Dismantle		
ART 160, ECON 101, PHIL 102, PSY 101			TMST 230B Lead Foreman Training	2	
U.S. AND NEVADA CONSTITUTIONS:	6		TMST 240B First Aid/CPR	1	
HIST 101 and HIST 102 or HIST 101 and HIST 217			TMST 250B Condor Operating	3	
11151 101 and 11151 217			TMST 260B Rigging	1	
			TMST 270B Scissor Lift	1	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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

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

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

60 CONVEN-AAS Total Credits

# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS), TRADE UNION TILE SETTER APPRENTICE

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

## **GENERAL EDUCATION REQUIREMENTS (33-35 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	6	
<b>ENGLISH</b> : ENG 101, 102, 107	6	
<b>HUMAN RELATIONS</b> : ALS 101, ANTH 101, 112, HIST 105, HMS 130, MGT 100B	3	
MATHEMATICS: MATH 116	3	
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	

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
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	

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

HIST 101 and HIST 217

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



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 - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_ COM 101, 215, ENG 101

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

BRCKTD-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
CPT 102B	Orientation	2	
CPT 104B	Safety and Health Certifications	2	
CPT 105B	Basic Wall Framing	1.5	
<b>CPT 107B</b>	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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

CART-CT Total Credits



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

#### CR **SEMESTER COMMUNICATIONS:** 3 COM 101, 215, ENG 101

#### **SPECIAL PROGRAM REQUIREMENTS (28 Credits):**

		CR	SEMESTER
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, 201B, 202B, 251B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.



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 651-4163.

#### STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

#### CR **SEMESTER COMMUNICATIONS:** 3 COM 101, 215, ENG 101

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
CPT 102B	Orientation	2	
CPT 104B	Safety and Health Certifications	2	
<b>CPT 107B</b>	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 included in DWA 117B

Human Relations included in CPT 102B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

DWA-CT

Total Credits

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

2

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

CR SEMESTER

COMMUNICATIONS: 3 \_\_\_\_\_

COM 101, 215, ENG 101

Continued from previous column.

Asbestos Abatement

Scaffold Building

Pipe Laying (Pressurized)

APP 136B

APP 139B

**APP 140B** 

				1111 1102	Beariola Ballania	_	
				APP 142B	Forklift Operations and Awareness	1	
SPECIAL P	PROGRAM REQUIREMENTS (			APP 144B	Operation of Motor Driven Power Equipment	1	
APP 102B	Introduction to Apprentice Craft	CR 4	SEMESTER	APP 146B	Operation of Concrete Core Drilling, Saw Cutting and Compaction Equipment	1	
APP 104B	General Construction	4		APP 150B	Mason Tending (Trowel)	2	
APP 105B	Concrete Flat Work	2		APP 152B	Plaster Tending (Mixing)	2	
APP 107B APP 127B	Concrete Walls and Columns Work Rigging and Signaling	2 2		APP 160B	Miners Preparedness and Awareness	4	
Plus thirteen	(13) credits from the following:			APP 162B	Drilling and Blasting	4	
APP 108B	Body Mechanics and Fall Protection	1		APP 164B APP 166B	Pneumatic Air Tool Handling Mine Rescue	2	
APP 120B	Confined Space Awareness	2		APP 168B	Microbial Remediation	1	
APP 121B	Line and Grade	4		APP 200B	OSHA for Laborers	2	
APP 122B	Oxyfuel Gas Cutting	4		APP 212B	Foreman Preparedness	2	
APP 123B APP 128B	Blueprint Reading for Laborers	3 2		APP 263B	Weatherization Installation Technician	5	
APP 130B	Asphalt  Hazardous Waste  Handling for Laborers	4		APP 266B APP 269B	Weatherization Supervisor Weatherization Energy Auditor	3	
APP 132B APP 134B	Radiation Lead Abatement	1 2		1	included in APP 104B, 105B, 107B, ions included in APP 102B, 212B	120B, 12	1B

Continued in next column.

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

LBCONT-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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 abilit	y to	troub	leshoot	and	repair	any	problems	S
	that arise in (	Operating	Eng	ineers	work.					

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS:	3	
COM 101, 215, ENG 101		

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
OPE 101B	Introduction to Apprenticeship/Operation and Maintenance	5	
OPE 153B	Grade Checking I	5	
OPE 155B	Plan Reading/Grade Checking II	5	
OPE 157B	Specialized Equipment	5	
OPE 159B	Cranes	5	
OPE 270B	OSHA 30	2	

Computation included in OPE 153B, 155B

Human Relations included in OPE 101B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

OPEEQP-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_ COM 101, 215, ENG 101

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

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

Computation included in FLCV 200B, 221B

Human Relations included in FLCV 231B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

FLOOR-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- Comprehend and utilize all applicable building codes and inspection requirements.
- Comprehend and utilize formulas used in the calculations of all phases of construction inspection.

<ul> <li>Demonstrate the ability to troubleshoot and report any problem</li> </ul>	ns
that arise in during a structural inspection.	

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
OPE 201B	Hazardous Materials Handling Awareness	5	
OPE 202B	Soils Inspection and Testing	5	
OPE 204B	Reinforced Concrete Inspector	5	
OPE 206B	Pre-Stressed Concrete Inspector	5	
OPE 208B	Structural Masonry Inspector	5	
OPE 270B	OSHA 30	2	

Computation included in OPE 202B, 204B, 206B, 208B

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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

OPECONS-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_ COM 101, 215, ENG 101

# **SPECIAL PROGRAM REQUIREMENTS (27 Credits):**

		CR	SEMESTER
GLZR 111B	Glazier I	5	
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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

GLAZ-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS:	3	
COM 101, 215, ENG 101		

#### SPECIAL PROGRAM REQUIREMENTS (29 Credits):

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

Computation included in ASB 101B, 111B

Human Relations included in ASB 201B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

HTFRST-CT



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 651-4163.

### STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS:	3	
COM 101, 215, ENG 101		

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
OPE 101B	Introduction to Apprenticeship/Operation and Maintenance	5	
OPE 108B	Hydraulics	5	
OPE 124B	Blueprint Reading for Welders/Machinists	5	
OPE 201B	Hazardous Materials Handling Awareness	5	
OPE 210B	Diesel and High Compression Engines	5	
<b>OPE 270B</b>	OSHA 30	2	

Computation included in OPE 108B, 124B, 210B

Human Relations included in OPE 101B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

OPERPR-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	

- Demonstrate the ability to troubleshoot and repair any problems that arise in electrical systems.
- · Successfully pass Journeyman Electrician's exams administered by the I.B.E.W. and the Clark County Building Department.

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

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

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

Human Relations included in ELEC 112B, 121B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

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

**ELAPPR-CT** 



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

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- Comprehend and utilize all applicable electrical tools.
- Comprehend and utilize formulas used in the calculations of all phases of electrical work.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	

- Install all necessary equipment to complete any electrical system.
- Comprehend the ability to troubleshoot and repair any problems that arise in electrical systems.

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
ELEC 127B	Mobile Equipment Safety	1	
ELEC 137B	OSHA 30	2	
ELEC 161B	Installer/Technician Apprentice I	4	
ELEC 162B	Installer/Technician Apprentice II	4	
ELEC 163B	Installer/Technician Apprentice III	4	
ELEC 164B	Installer/Technician Apprentice IV	4	
ELEC 165B	Installer/Technician Apprentice V	4	
ELEC 166B	Installer/Technician Apprentice VI	4	

Computation included in ELEC 161B, 162B

Human Relations included in ELEC 161B, 162B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

ELEAPPR-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS:	3	
COM 101, 215, ENG 101		

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
OPE 101B	Introduction to Apprenticeship/Operation and Maintenance	5	
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	
<b>OPE 270B</b>	OSHA 30	2	

Computation included in OPE 116B

Human Relations included in OPE 101B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

OPEMACH-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_\_ COM 101, 215, ENG 101

# SPECIAL PROGRAM REQUIREMENTS (27.5 Credits):

		CR	SEMESTER
CPT 102B	Orientation	2	
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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

MWA-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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 the	ıat
arise in oil well drilling work.	

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS:	3	
COM 101, 215, ENG 101		

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
OPE 101B	Introduction to Apprenticeship/Operation and Maintenance	5	
OPE 173B	Drilling I	5	
OPE 175B	Drilling II	5	
OPE 177B	Drilling III	5	
OPE 201B	Hazardous Materials Handling Awareness	5	
<b>OPE 270B</b>	OSHA 30	2	

Computation included in OPE 173B, 175B, 177B

Human Relations included in OPE 101B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

OPEOIL-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_ COM 101, 215, ENG 101

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
PTD 101B	Painting/Decorating Apprentice I	4	
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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

PAINT-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	

# SPECIAL PROGRAM REQUIREMENTS (28 Credits):

		CR	SEMESTER
CPT 102B	Orientation	2	
CPT 104B	Safety and Health Certifications	2	
<b>CPT 107B</b>	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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

PDA-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS: COM 101, 215, ENG 101	3	

- 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.

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
PPF 101B	First Year Plumbers and Pipefitters Apprentice I	4	
PPF 102B	First Year Plumbers and Pipefitters Apprentice II	4	
PPF 116B	Technical Math for Piping Trades	2	
PPF 151B	Second Year Plumbers and Pipefitters Apprentice I	4	
PPF 152B	Second Year Plumbers and Pipefitters Apprentice II	4	
PPF 170B	OSHA 10	0.5	
PPF 201B	Third Year Plumbers and Pipefitters Apprentice I	4	
PPF 202B	Third Year Plumbers and Pipefitters Apprentice II	4	
PPF 240B	First Aid/CPR	0.5	

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

Human Relations included in PPF 101B, 102B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

PPF-C



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

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

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS:	3	
COM 101, 215, ENG 101		

# SPECIAL PROGRAM REQUIREMENTS (28 Credits):

		CR	SEMESTER
PLA 111B	Plasterer Apprentice I	4	
PLA 112B	Plasterer IB	3	
PLA 141B	Plasterer II	3	
PLA 142B	Plasterer IIB	4	
PLA 201B	Plasterer Apprentice III	3	
PLA 202B	Plasterer Apprentice IIIB	4	
PLA 251B	Plasterer Apprentice IV	3	
PLA 252B	Plasterer Apprentice IVB	4	

Computation included in PLA 141B, 142B

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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

PLA-CT Total Cr



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_ COM 101, 215, ENG 101

#### SPECIAL PROGRAM REQUIREMENTS (35 Credits):

		CR	SEMESTER
IRW 110B	Introduction to Ironworking	2	
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 included in IRW 114B, 204B

Human Relations included in IRW 208B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

IRWIRN-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS:	3	
COM 101, 215, ENG 101		

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
ELEC 115B	Residential Apprentice I	4	
TT TO 11 O			
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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

ELRES-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_ COM 101, 215, ENG 101

#### SPECIAL PROGRAM REQUIREMENTS (28 Credits):

		CR	SEMESTER
RFR 101B	Roofers Apprentice I	4	
RFR 102B	Roofers Apprentice I s	4	
RFR 151B	Roofers Apprentice II	4	
RFR 152B	Roofers Apprentice II s	4	
RFR 201B	Roofers Apprentice III	4	
RFR 211B	Safety	4	
RFR 212B	CPR, First Aid and OSHA 10	4	

Computation included in RFR 102B

Human Relations included in RFR 101B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

ROOF-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 COM 101, 215, ENG 101

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
CPT 102B	Orientation	2	
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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

SEA-CT Total C



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 651-4163.

#### STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 COM 101, 215, ENG 101

#### SPECIAL PROGRAM REQUIREMENTS (29 Credits):

		CR	SEMESTER
First Year:			
SMTL 111B	First Aid/CPR I	0.5	
SMTL 113B	Sheet Metal Drafting	4	
SMTL 114B	Layout/Fabrication I	4	
SMTL 115B	Sheet Metal Apprentice I	3	
SMTL 121B	OSHA 10	1	
Second Yea	<u>ar</u> :		
SMTL 122B	Sheet Metal Plans and Specifications	4	
SMTL 123B	Layout/Fabrication II	4	
SMTL 124B	Sheet Metal Apprentice II	4	
Third Year:			
SMTL 230B	First Aid/CPR II	0.5	
Choose one o	f the following courses:		
SMTL 234B	Architectural Sheet Metal I	4	
SMTL 240B	CAD/Detailing I	4	
SMTL 242B	TAB I	4	
SMTL 244B	Advanced Welding/Industrial I	4	
SMTL 246B	HVAC-R Equipment I	4	
SMTL 248B	Food Service Equipment Fabrication/Installation I	4	

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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

SHEMET-CT

**32** Total Credits

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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- Comprehend and utilize all applicable electrical tools.
- Comprehend and utilize formulas used in the calculations of all phases of electrical work.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

CR	SEMESTER
3	
	<b>CR</b> 3

- Install all necessary equipment to complete any electrical system.
- Demonstrate the ability to troubleshoot and repair any problems that arise in electrical systems.

# SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
ELEC 127B	Mobile Equipment Safety	1	
ELEC 137B	OSHA 30	2	
<b>ELEC 171B</b>	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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

**ELSIGN-CT** 



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 651-4163.

#### STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

# **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_ COM 101, 215, ENG 101

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

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

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

Human Relations included in OPME 108B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

OPME-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS:	3	
COM 101, 215, ENG 101		

#### SPECIAL PROGRAM REQUIREMENTS (34 Credits):

		CR	SEMESTER
IRW 110B	Introduction to Ironworking	2	
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 included in IRW 114B, 205B

Human Relations included in IRW 208B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

IRWSTL-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_ COM 101, 215, ENG 101

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
OPE 101B	Introduction to Apprenticeship/Operation and Maintenance	5	
OPE 110B	Technical Sketching	5	
OPE 111B	Land Surveying	5	
OPE 116B	Machinists/Surveyors Math	5	
OPE 117B	Applied Math for Surveyors	5	
<b>OPE 270B</b>	OSHA 30	2	

Computation included in OPE 116B, 117B

Human Relations included in OPE 101B

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

OPESUV-CT





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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_ COM 101, 215, ENG 101

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

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

Computation included in TMST 160B, 220B

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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

CONVEN-CT



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 651-4163.

# STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- 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.

#### **GENERAL EDUCATION REQUIREMENTS (3 Credits):**

# CR SEMESTER COMMUNICATIONS: 3 \_\_\_\_\_ COM 101, 215, ENG 101

#### SPECIAL PROGRAM REQUIREMENTS (27 Credits):

		CR	SEMESTER
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

Students may elect to graduate using the degree requirements in effect at the time of matriculation or completion. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program.

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.

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

TILE-CT

