

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

This Associate of Applied Science Degree builds the skills required to provide professional and quality workmanship in the construction industry. The core curriculum stresses the theory and application of rough and finish electrical, low-voltage, photovoltaic, plumbing or weatherization, depending on which trade the student chooses, for residential and commercial construction. Instruction includes classroom and laboratory course work. 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 workplace.

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

- Read construction prints, to include: site, foundation, floor and structural plans, sectional and detail views and electrical, low-voltage or plumbing plans.
- Calculate electrical, low-voltage, photovoltaic, plumbing, or weatherization construction related formulas.
- Identify the equipment, material and/or systems necessary for any given residential or commercial electrical, low-voltage, photovoltaic, plumbing, or weatherization situation.
- Interpret electrical, low-voltage, photovoltaic, plumbing or weatherization building codes.
- Explain how to troubleshoot and repair problems that arise in electrical, low-voltage, photovoltaic, plumbing, or weatherization systems.

**GENERAL EDUCATION REQUIREMENTS (22 Credits):**

	CR	SEMESTER
<b>COMMUNICATIONS:</b> COM 115	3	_____
<b>ENGLISH:</b> ENG 100, 101, 113	3-5	_____
<b>HUMAN RELATIONS:</b> MGT 100B	3	_____
<b>MATHEMATICS:</b> MATH 104B or above (except MATH 111B, 115B, 122, 123)	3	_____
<b>SCIENCE:</b> ENV 101	3	_____
<b>FINE ARTS/HUMANITIES/ SOCIAL SCIENCES:</b> PSY 101, SOC 101	3	_____
<b>U.S. AND NEVADA CONSTITUTIONS:</b> PSC 101 or HIST 101 and HIST 217	4-6	_____

**SPECIAL PROGRAM REQUIREMENTS (38.5 Credits):**

	CR	SEMESTER
<b>AC 119B</b> Professionals in Customer Service	1.5	_____
<b>CADD 100</b> Introduction to Computer Aided Drafting	3	_____
<b>CONS 120B</b> Printreading and Specifications	3	_____
<b>CONS 205B</b> Construction Site Safety OSHA Standards	3	_____
<b>CONS 288B</b> Quality Control of Construction Waste	3	_____
<b>SCT 101B</b> Fundamentals of Sustainability	3	_____
<b>SCT 105B</b> Sustainable Construction Materials	3	_____
<b>FOR ELECTRICAL:</b>		
<b>BTE 116B</b> Electrical Theory and Applications 1	3	_____
<b>BTE 120B</b> Electrical Theory and Applications 2	3	_____
<b>BTE 130B</b> Electrical Theory and Applications 3	3	_____
<b>BTE 210B</b> Electrical Theory and Applications 4	3	_____
<b>BTLV 110B</b> Low-Voltage Theory and Applications 1	3	_____
<b>BTPV 101B</b> Photovoltaic Fundamentals	4	_____

*Continued from previous column.*

**FOR LOW-VOLTAGE TECHNOLOGY:**

	CR	SEMESTER
<b>BTE 116B</b> Electrical Theory and Applications 1	3	_____
<b>BTLV 110B</b> Low-Voltage Theory and Applications 1	3	_____
<b>BTLV 120B</b> Low-Voltage Theory and Applications 2	4	_____
<b>BTLV 130B</b> Low-Voltage Theory and Applications 3	4	_____
<b>BTLV 210B</b> Low-Voltage Theory and Applications 4	5	_____

**FOR PHOTOVOLTAIC:**

	CR	SEMESTER
<b>BI 107B</b> Introduction to Energy Conservation Code	1	_____
<b>BTE 116B</b> Electrical Theory and Applications 1	3	_____
<b>BTPV 101B</b> Photovoltaic Fundamentals	4	_____
<b>BTPV 102B</b> Photovoltaic Design and Sales	4	_____
<b>BTPV 201B</b> Photovoltaic Onsite Training	4	_____
<b>SCT 113B</b> Renewable Energy Efficiency	3	_____

**FOR PLUMBING:**

	CR	SEMESTER
<b>BTFS 110B</b> Fire Sprinkler Theory and Applications 1	3	_____
<b>BTFS 210B</b> Fire Sprinkler Theory and Applications 2	4	_____
<b>BTP 115B</b> Plumbing Theory and Applications 1	3	_____
<b>BTP 120B</b> Plumbing Theory and Applications 2	3	_____
<b>BTP 130B</b> Plumbing Theory and Applications 3	3	_____
<b>BTP 210B</b> Plumbing Theory and Applications 4	3	_____

**FOR WEATHERIZATION:**

	CR	SEMESTER
<b>BI 107B</b> Introduction to Energy Conservation Code	1	_____
<b>BTW 101B</b> Basic Weatherization	4	_____
<b>BTW 103B</b> Blower Door and Combustion Appliance Safety	2	_____
<b>BTW 105B</b> Lead and Mold Safety	2	_____
<b>BTW 201B</b> Building Performance	4	_____
<b>BUS 102B</b> Entrepreneurship and Innovation	3	_____
<b>SCT 210B</b> Sustainable Technology	3	_____

*Continued in next column.*

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

**60.5**  
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.

Guided Pathway 2014-2015  
**AAS CONSTRUCTION TECHNOLOGY**  
 BUILDING TRADES- ELECTRICAL  
 60.5 Credits

<b>First Semester</b> <i>Fall</i>			<i>Credits</i>	<i>Completed</i>
BTE 116B	Electrical Theory and Applications 1	3	<i>Fall Only</i>	_____
CONS 120B	Printreading and Specifications	3		_____
ENG	English Placement Test	3	<i>Fall Only</i>	_____
SCT 101B	Fundamentals of Sustainability	3		_____
<b>Total</b>		<b>12</b>		

<b>Second Semester</b>			<i>Credits</i>	
BTE 120B	Electrical Theory and Applications 2	3	<i>Spring Only</i>	_____
BTPV 101B	Photovoltaic Fundamentals	4	<i>Spring Only</i>	_____
COM 115	Applied Communication	3		_____
SCT 105B	Sustainable Construction Materials	3		_____
<b>Total</b>		<b>13</b>		

<b>Third Semester</b>			<i>Credits</i>	
BTE 130B	Electrical Theory and Applications 3	3	<i>Fall Only</i>	_____
BTLV 110B	Low-Voltage Theory and Applications 1	3	<i>Fall Only</i>	_____
CONS 288B	Quality Control of Construction Waste	3	<i>Fall Only</i>	_____
SCT 105B	Sustainable Construction of New Buildings	3		_____
<b>Total</b>		<b>12</b>		

<b>Fourth Semester</b>			<i>Credits</i>	
AC 119B	Professionals in Customer Service	1.5	<i>Spring Only</i>	_____
BTE 210B	Electrical Theory and Applications 4	3	<i>Spring Only</i>	_____
CADD 100	Introduction to Computer Aided Drafting	3		_____
PSC 101	Introduction to American Politics	4		_____
<b>Total</b>		<b>11.5</b>		

<b>Fifth Semester</b>			<i>Credits</i>	
MATH 104B	Applied Mathematics	3		_____
MGT 100B	Practical Human Relations for Business	3		_____
ENV 101	Introduction to Environmental Science	3		_____
Fine Arts/Humanities/Soc Sc Requirement ( <b>choose one</b> )		3		_____
<b>Total</b>		<b>12</b>		

Guided Pathway 2014-2015  
**AAS CONSTRUCTION TECHNOLOGY**  
 BUILDING TRADES- ELECTRICAL  
 60.5 Credits

First Semester			Credits	Completed
BTE 116B	Electrical Theory and Applications 1	3	<i>Fall Only</i>	_____
CONS 120B	Printreading and Specifications	3		_____
ENG	English Placement Test	3		_____
MATH 104B	Applied Mathematics	3		_____
SCT 101B	Fundamentals of Sustainability	3		<i>Fall Only</i>
<b>Total</b>		<b>15</b>		

Second Semester			Credits	Completed
BTE 120B	Electrical Theory and Applications 2	3	<i>Spring Only</i>	_____
BTPV 101B	Photovoltaic Fundamentals	4	<i>Spring Only</i>	_____
COM 115	Applied Communication	3		_____
SCT 105B	Sustainable Construction Materials	3		_____
MGT 100B	Practical Human Relations for Business	3		_____
<b>Total</b>		<b>16</b>		

Third Semester			Credits	Completed
BTE 130B	Electrical Theory and Applications 3	3	<i>Fall Only</i>	_____
BTLV 110B	Low-Voltage Theory and Applications 1	3	<i>Fall Only</i>	_____
CONS 288B	Quality Control of Construction Waste	3	<i>Fall Only</i>	_____
ENV 101	Introduction to Environmental Science	3		_____
SCT 105B	Sustainable Construction of New Buildings	3		_____
<b>Total</b>		<b>15</b>		

Fourth Semester			Credits	Completed
AC 119B	Professionals in Customer Service	1.5	<i>Spring Only</i>	_____
BTE 210B	Electrical Theory and Applications 4	3	<i>Spring Only</i>	_____
CADD 100	Introduction to Computer Aided Drafting	3		_____
Fine Arts/Humanities/Soc Sc Requirement ( <b>choose one</b> )		3		_____
PSC 101	Introduction to American Politics	4		_____
<b>Total</b>		<b>14.5</b>		

Guided Pathways  
**AAS CONSTRUCTION TECHNOLOGY**  
 BUILDING TRADES- PLUMBING  
 60.5 Credits

<b>First Semester</b> <i>Fall</i>			<i>Credits</i>	<i>Completed</i>
BTP 115B	Plumbing Theory and Applications 1	3	<i>Fall Only</i>	_____
CONS 120B	Printreading and Specifications	3		_____
ENG	English Placement Test	3	<i>Fall Only</i>	_____
SCT 101B	Fundamentals of Sustainability	3		_____
<b>Total</b>		<b>12</b>		

<b>Second Semester</b>			<i>Credits</i>	
BTFS 110B	Fire Sprinkler Theory and Applications 1	3	<i>Spring Only</i>	_____
BTP 120B	Plumbing Theory and Applications 2	3	<i>Spring Only</i>	_____
COM 115	Applied Communication	3		_____
SCT 105B	Sustainable Construction Materials	3		_____
<b>Total</b>		<b>12</b>		

<b>Third Semester</b>			<i>Credits</i>	
BTFS 210B	Fire Sprinkler Theory and Applications 2	3	<i>Fall Only</i>	_____
BTE 130B	Electrical Theory and Applications 3	4	<i>Fall Only</i>	_____
CONS 288B	Quality Control of Construction Waste	3	<i>Fall Only</i>	_____
SCT 105B	Sustainable Construction of New Buildings	3		_____
<b>Total</b>		<b>13</b>		

<b>Fourth Semester</b>			<i>Credits</i>	
AC 119B	Professionals in Customer Service	1.5	<i>Spring Only</i>	_____
BTP 210B	Plumbing Theory and Applications 4	3	<i>Spring Only</i>	_____
CADD 100	Introduction to Computer Aided Drafting	3		_____
PSC 101	Introduction to American Politics	4		_____
<b>Total</b>		<b>11.5</b>		

<b>Fifth Semester</b>			<i>Credits</i>	
MATH 104B	Applied Mathematics	3		_____
MGT 100B	Practical Human Relations for Business	3		_____
ENV 101	Introduction to Environmental Science	3		_____
Fine Arts/Humanities/Soc Sc Requirement ( <b>choose one</b> )		3		_____
<b>Total</b>		<b>12</b>		

Guided Pathways 2014-2015  
**AAS CONSTRUCTION TECHNOLOGY**  
 BUILDING TRADES- PLUMBING  
 60.5 Credits

<b>First Semester</b> <i>Fall</i>			<i>Credits</i>	<i>Completed</i>
BTP 115B	Plumbing Theory and Applications 1	3	<i>Fall Only</i>	_____
CONS 120B	Printreading and Specifications	3		_____
ENG	English Placement Test	3		_____
MATH 104B	Applied Mathematics	3		_____
SCT 101B	Fundamentals of Sustainability	3		<i>Fall Only</i>
<b>Total</b>		<b>15</b>		

<b>Second Semester</b>			<i>Credits</i>	
BTFS 110B	Fire Sprinkler Theory and Applications 1	3	<i>Spring Only</i>	_____
BTP 120B	Plumbing Theory and Applications 2	3		<i>Spring Only</i>
COM 115	Applied Communication	3		_____
SCT 105B	Sustainable Construction Materials	3		_____
MGT 100B	Practical Human Relations for Business	3		_____
<b>Total</b>		<b>15</b>		

<b>Third Semester</b>			<i>Credits</i>	
BTFS 210B	Fire Sprinkler Theory and Applications 2	3	<i>Fall Only</i>	_____
BTE 130B	Electrical Theory and Applications 3	4	<i>Fall Only</i>	_____
CONS 288B	Quality Control of Construction Waste	3	<i>Fall Only</i>	_____
ENV 101	Introduction to Environmental Science	3		_____
SCT 105B	Sustainable Construction of New Buildings	3		_____
<b>Total</b>		<b>16</b>		

<b>Fourth Semester</b>			<i>Credits</i>	
AC 119B	Professionals in Customer Service	1.5	<i>Spring Only</i>	_____
BTP 210B	Plumbing Theory and Applications 4	3	<i>Spring Only</i>	_____
CADD 100	Introduction to Computer Aided Drafting	3		_____
Fine Arts/Humanities/Soc Sc Requirement ( <b>choose one</b> )		3		_____
PSC 101	Introduction to American Politics	4		_____
<b>Total</b>		<b>14.5</b>		