# CONSTRUCTION TECHNOLOGY – BUILDING TRADES 60 Credits

## 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 (26 Credits):**

| | CR | SEMESTER |
|---|---|---|
| **COMMUNICATIONS**: COM 101 | 3 | _____ |
| **ENGLISH**: ENG 100, 101, 107, 113 | 3-5 | _____ |
| **HUMAN RELATIONS**: PHIL 135 | 3 | _____ |
| **MATHEMATICS**: MATH 116 or above (except MATH 122, 123) | 3 | _____ |
| **SCIENCE**: EGG 131, GEOG 103 | 7 | _____ |
| **FINE ARTS/HUMANITIES/ SOCIAL SCIENCES:** PSY 101, SOC 101 | 3 | _____ |
| **U.S. AND NEVADA CONSTITUTIONS:** PSC 101 or HIST 101 and HIST 217 | 4-6 | _____ |

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

| | | CR | SEMESTER |
|---|---|---|---|
| **CONS 120B** | Printreading and Specifications | 3 | _____ |
| **CONS 205B** | Construction Site Safety OSHA Standards | 3 | _____ |
| **CONS 288B** | Quality Control of Construction Waste | 3 | _____ |
| **SCT 101B** | Fundamentals of Sustainable Construction | 3 | _____ |
| **SCT 105B** | Sustainable Construction Materials | 3 | _____ |

**FOR ELECTRICAL:**

| | | | |
|---|---|---|---|
| **BTE 116B** | Electrical Theory and Applications 1 | 3 | _____ |
| **BTE 120B** | Electrical Theory and Applications 2 | 3 | _____ |
| **BTE 130B** | Electrical Theory and Applications 3 | 3 | _____ |
| **BTE 210B** | Electrical Theory and Applications 4 | 3 | _____ |
| **BTLV 110B** | Low-Voltage Theory and Applications 1 | 3 | _____ |
| **BTPV 101B** | Photovoltaic Fundamentals | 4 | _____ |

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**FOR LOW-VOLTAGE TECHNOLOGY:**

| | | | |
|---|---|---|---|
| **BTE 116B** | Electrical Theory and Applications 1 | 3 | _____ |
| **BTLV 110B** | Low-Voltage Theory and Applications 1 | 3 | _____ |
| **BTLV 120B** | Low-Voltage Theory and Applications 2 | 3 | _____ |
| **BTLV 130B** | Low-Voltage Theory and Applications 3 | 4 | _____ |
| **BTLV 210B** | Low-Voltage Theory and Applications 4 | 5 | _____ |

**FOR PHOTOVOLTAIC:**

| | | | |
|---|---|---|---|
| **BI 107B** | Introduction to Energy Conservation Code | 1 | _____ |
| **BTE 116B** | Electrical Theory and Applications 1 | 3 | _____ |
| **BTPV 101B** | Photovoltaic Fundamentals | 4 | _____ |
| **BTPV 102B** | Photovoltaic Designs and Sales | 4 | _____ |
| **BTPV 201B** | Photovoltaic Onsite Training | 4 | _____ |
| **SCT 113B** | Renewable Energy Efficiency | 3 | _____ |

**FOR PLUMBING:**

| | | | |
|---|---|---|---|
| **BTFS 110B** | Fire Sprinkler Theory and Applications 1 | 3 | _____ |
| **BTFS 210B** | Fire Sprinkler Theory and Applications 2 | 4 | _____ |
| **BTP 115B** | Plumbing Theory and Applications 1 | 3 | _____ |
| **BTP 120B** | Plumbing Theory and Applications 2 | 3 | _____ |
| **BTP 130B** | Plumbing Theory and Applications 3 | 3 | _____ |
| **BTP 210B** | Plumbing Theory and Applications 4 | 3 | _____ |

**FOR WEATHERIZATION:**

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

**60** Total Credits

ASSOCIATE OF APPLIED SCIENCE

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.