

# INSPECTION TECHNOLOGY

Construction and building inspectors ensure that new construction, changes, or repairs comply with local and national building codes and ordinances, zoning regulations, and contract specifications. Construction and building inspectors examine buildings, highways and streets, sewer and water systems, dams, bridges, and other structures. They also inspect electrical; heating, ventilation, air conditioning, and refrigeration (HVAC/R); and plumbing systems.

Although no two inspections are alike, inspectors do an initial check during the first phase of construction and follow-up inspections throughout the construction project. When the project is finished, they do a final, comprehensive inspection. Inspectors work alone or as part of a team. Some inspectors may have to climb ladders or crawl in tight spaces. Most work full time during regular business hours. Concern for public safety and a desire to improve the quality of construction are expected to spur employment growth in the field.

## Contact Information

Division: Applied Technology, Transportation, and Culinary Arts (T - 108)

Division Phone Number: (909) 384-4451

Faculty Chairs: Bryce Cacho (bcacho@sbccd.edu), M.A. and Joshua Milligan (jmilligan@sbccd.edu), A.S.

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- Inspection Technology Associate of Science Degree (<http://catalog.valleycollege.edu/degree-certificate-program-index/inspection-technology/inspection-technology-as-degree/>)
- Inspection Technology Certificate of Achievement (<http://catalog.valleycollege.edu/degree-certificate-program-index/inspection-technology/inspection-technology-certificate-achievement/>)
- Inspection Technology Certificate of Completion (<http://catalog.valleycollege.edu/degree-certificate-program-index/inspection-technology/inspection-technology-noncredit-certificate-completion/>)

### INSPEC 011 3 Units

#### Fundamentals of Construction Inspection: Soils and Concrete

**Lecture:** 54 contact hours

This course provides a basic study of soils engineering, soils construction methods, soils identification, soils terminology, concrete and asphalt including cements, aggregates, admixtures, job and batch control, properties of concrete, finishing, curing, reinforcing and nomenclature for inspectors.

**Associate Degree Applicable**

### INSPEC 012 3 Units

#### Fundamentals of Construction Inspection: Wood, Steel, Masonry

**Lecture:** 54 contact hours

This course is a basic study of structures, including wood, steel, and masonry construction, building occupancies, construction and separations, acoustics and sound control (formerly INSPEC 012B).

**Associate Degree Applicable**

### INSPEC 013 3 Units

#### Advanced Construction Inspection: International Building Code (IBC)

**Lecture:** 54 contact hours

This course provides for inspectors a study of the International Building Code (IBC) including application, interpretation, and use of the code (formerly INSPEC 013D).

**Associate Degree Applicable**

### INSPEC 014 3 Units

#### Advanced Construction Inspection: National Electrical Code (NEC)

**Lecture:** 54 contact hours

This course provides an understanding of the National Electrical Code and a study of its applications (formerly INSPEC 014D).

**Associate Degree Applicable**

### INSPEC 015 3 Units

#### Advanced Construction Inspection: Uniform Plumbing Code (UPC)

**Lecture:** 54 contact hours

This course is a study, interpretation and application of the CA Plumbing Code (CPC) (Formerly INSPEC 015D).

**Associate Degree Applicable**

### INSPEC 016 3 Units

#### Advanced Construction Inspection: Uniform Mechanical Code (UMC)

**Lecture:** 54 contact hours

This course is a study of the requirements for the design, construction, installation and maintenance of heating, ventilating, cooling, refrigeration systems, incinerators and other heat-producing appliances required by the CA Mechanical Code (CMC) (formerly INSPEC 016D).

**Associate Degree Applicable**

### INSPEC 017 3 Units

#### California State Energy Regulations for Residential Buildings

**Lecture:** 54 contact hours

This course is a study of the basic compliance requirements of the California Title 24 Energy Efficiency Standards for residential buildings and the 2016 CA Green Building Standards Code. It includes prescriptive and performance methods such as alternative packages and computer models (formerly INPSEC 017D).

**Associate Degree Applicable**

### INSPEC 018 3 Units

#### California State Energy Regulations for Non-Residential Buildings

**Lecture:** 54 contact hours

This course studies basic compliance with California Title 24 Energy Efficiency Standards for non-residential buildings and CA Green Building Standards Code. It includes prescriptive and performance methods such as alternative packages and computer models (formerly INPSEC 018D).

**Associate Degree Applicable**

### INSPEC 026 3 Units

#### Non-Structural Plan Review

**Lecture:** 54 contact hours

This course provides training in the application of the CA Codes to construction drawings, including legal requirements for non-structural plan review, local, State, and Federal laws applicable to construction drawings, and the use of plan reviews as a first step in performing consistent and thorough inspections (formerly INSPEC 026D).

**Associate Degree Applicable**

### INSPEC 027 3 Units

#### Structural Plan Review

**Lecture:** 54 contact hours

This is a basic study of simplified engineering that can be applied to both plan checking and field inspections.

**Associate Degree Applicable**

**INSPEC 028 3 Units****California Residential Code****Lecture:** 54 contact hours

This course provides building and safety personnel with a study of the California Residential Code (CRC) including application, interpretation, and use of the code.

**Associate Degree Applicable****INSPEC 029 3 Units****Community Relations for Building Personnel****Lecture:** 54 contact hours

This course covers the development of oral and written communication skills for code enforcement personnel and an introduction to community relations for civil service employees. Topics include the proper methods of dealing with different types of encounters that an inspector may have with do-it-yourself homeowners, contractors, developers, etc. and the legal aspects of code administration and enforcement.

**Associate Degree Applicable****INSPEC 030 3 Units****Aspects of Building and Safety****Lecture:** 54 contact hours

This course prepares students for the basic administrative functions of building and safety including: Title 25, Disabled access, staff roles, permit and plan checking, building inspection, and code enforcement.

**Associate Degree Applicable****INSPEC 098 1-4 Units****Inspection Technology Work Experience****WRKEX:** 300 contact hours

Supervised training, in the form of on the job employment that will enhance the student's knowledge in the selected field of study. The student's major and job must match. For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 098 courses. See department for specific guidelines.

**Associate Degree Applicable****INSPEC 611 Noncredit****Fundamentals of Construction Inspection: Soils and Concrete****Lecture:** 54 contact hours

This noncredit course provides a basic study of soils engineering, soils construction methods, soils identification, soils terminology, concrete and asphalt including cements, aggregates, admixtures, job and batch control, properties of concrete, finishing, curing, reinforcing and nomenclature for inspectors.

**INSPEC 612 Noncredit****Fundamentals of Construction Inspection: Wood, Steel, Masonry****Lecture:** 54 contact hours

This noncredit course is a basic study of structures, including wood, steel, and masonry construction, building occupancies, construction and separations, acoustics and sound control.

**INSPEC 613 Noncredit****Advanced Construction Inspection: International Building Code (IBC)****Lecture:** 54 contact hours

This noncredit course provides for inspectors a study of the International Building Code (IBC) including application, interpretation, and use of the code.

**INSPEC 614 Noncredit****Advanced Construction Inspection: National Electrical Code (NEC)****Lecture:** 54 contact hours

This noncredit course provides an understanding of the National Electrical Code and a study of its applications.

**INSPEC 615 Noncredit****Advanced Construction Inspection: Uniform Plumbing Code (UPC)****Lecture:** 54 contact hours

This noncredit course is a study, interpretation and application of the CA Plumbing Code (CPC).

**INSPEC 616 Noncredit****Advanced Construction Inspection: Uniform Mechanical Code (UMC)****Lecture:** 54 contact hours

This noncredit course is a study of the requirements for the design, construction, installation and maintenance of heating, ventilating, cooling, refrigeration systems, incinerators and other heat-producing appliances required by the CA Mechanical Code (CMC).

**INSPEC 617 Noncredit****California State Energy Regulations for Residential Buildings****Lecture:** 54 contact hours

This noncredit course is a study of the basic compliance requirements of the California Title 24 Energy Efficiency Standards for residential buildings and the 2016 CA Green Building Standards Code. It includes prescriptive and performance methods such as alternative packages and computer models.

**INSPEC 618 Noncredit****California State Energy Regulations For Non-Residential Buildings****Lecture:** 54 contact hours

This noncredit course studies basic compliance with California Title 24 Energy Efficiency Standards for non-residential buildings and CA Green Building Standards Code. It includes prescriptive and performance methods such as alternative packages and computer models.

**INSPEC 626 Noncredit****Non-Structural Plan Review****Lecture:** 54 contact hours

This noncredit course provides training in the application of the CA Codes to construction drawings, including legal requirements for non-structural plan review, local, State, and Federal laws applicable to construction drawings, and the use of plan reviews as a first step in performing consistent and thorough inspections.

**INSPEC 627 Noncredit****Structural Plan Review****Lecture:** 54 contact hours

This is a noncredit basic study of simplified engineering that can be applied to both plan checking and field inspections.

**INSPEC 628 Noncredit****California Residential Code****Lecture:** 54 contact hours

This noncredit course provides building and safety personnel with a study of the California Residential Code (CRC) including application, interpretation, and use of the code.

**INSPEC 629 Noncredit****Community Relations for Building Personnel****Lecture:** 54 contact hours

This noncredit course covers the development of oral and written communication skills for code enforcement personnel and an introduction to community relations for civil service employees. Topics include the proper methods of dealing with different types of encounters that an inspector may have with do-it-yourself homeowners, contractors, developers, etc. and the legal aspects of code administration and enforcement.

**INSPEC 630 Noncredit**  
**Aspects of Building and Safety**

**Lecture:** 54 contact hours

This noncredit course prepares students for the basic administrative functions of building and safety including: Title 25, Disabled access, staff roles, permit and plan checking, building inspection, and code enforcement.