Some courses within this program may require additional coursework that must be completed prior to enrollment in these courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.

Program Student Learning Outcome Statement
- Recognize and appropriately apply current and historical Software Engineering design patterns, algorithms, and data structures to produce efficient, well-engineered software products.

FIRST SEMESTER
MATH 119  Elementary Statistics  4
MATH 130  Introduction to Computer Programming  4

SECOND SEMESTER
MATH 140  Data Structures and Algorithms  4
MATH 250  Analytic Geometry and Calculus I  5

THIRD SEMESTER
MATH 230  Computer Organization and Architecture  4

Total units 21

Recommended Electives: MATH 251, 252, 253, 254, 260.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 64.

The program below is undergoing modification and the modification will be placed into an addendum upon Chancellor's Office approval - see your counselor for further information and visit the college website under http://www.swccd.edu/catalog link for the latest addenda updates.

CONSTRUCTION INSPECTION
SCHOOL OF BUSINESS AND TECHNOLOGY

DEAN: Mink Stavenga, DBA, Office 470K, 619-482-6569
DEPARTMENT CHAIR: Marie Vicario-Fisher, M.S., M.P.H.

GENERAL DESCRIPTION
Construction Inspection is the study of the design, fabrication, codes, inspection processes, and licensure governing the construction of structures, both residential and commercial. This program explores blueprint reading, site plans, cost estimation, construction materials, soil engineering, mechanical construction, inspection procedure, building codes, quality control management, and license laws for contractors.

CAREER OPTIONS
Below is a sample of the options for construction inspection majors. Most require a certificate achievement or an associate in science degree, some require a bachelor’s degree, and a few of these may require a graduate-level degree: construction inspector, estimator, apprentice as a carpenter, electrician, plumber, mason, cement finisher, roofer, painter, licensed contractor, soil engineer, architect, project engineer, quality control manager, vocational teacher, and positions available in all professions of manufacturing, retail and wholesale, business, industry, and the military or government.
DEGREE/CERTIFICATE OPTIONS

MAJOR CODE
Associate in Science Degree: Career/Technical
Construction Inspection 02880
Construction Management 02881

Certificates of Achievement
Construction Inspection 02882
Construction Management 02883

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

ASSOCIATE IN SCIENCE DEGREE

CONSTRUCTION INSPECTION

ASSOCIATE IN SCIENCE DEGREE
CAREER/TECHNICAL (MAJOR CODE: 02880)
Provides entry-level training to prepare students to become construction inspectors. Construction inspectors verify that contractors and subcontractors comply with the architect’s plans and the various uniform building codes. Construction inspection is recognized as a major career opportunity area by agencies of both industry and government.

Program Student Learning Outcome Statement
• Demonstrate an ability to apply problem solving strategies and integrate technical knowledge.

FIRST SEMESTER
CI 10 Building Plans and Construction Details 3
CI 60 Building Codes I 3

SECOND SEMESTER
CI 50 Legal Factors of Construction Inspection 3
CI 65 Building Codes II 3

THIRD SEMESTER
CI 20 Inspection of Mechanical Construction 3
CI 80 Soils Engineering 3

FOURTH SEMESTER
CI 40 Electrical Inspection 3
CI 70 Inspection of Architectural Details and Structural Inspection 3

Total units 24

Recommended Elective: CI 90.

To earn an associate degree, additional general education and graduation requirements must be completed. See page 64.

The program below is undergoing modification and the modification will be placed into an addendum upon Chancellor’s Office approval - see your counselor for further information and visit the college website under http://www.swccd.edu/catalog link for the latest addenda updates.

CONSTRUCTION MANAGEMENT

ASSOCIATE IN SCIENCE DEGREE
CAREER/TECHNICAL (MAJOR CODE: 02881)
Designed to provide students with the necessary skills and knowledge for employment within the construction industry. The construction manager is an integral member of the building team and requires a broad range of professional knowledge in the areas of construction methods and materials, building codes, cost analysis and control, construction scheduling, and consulting with the design professions during initial planning stages of a building program. Areas in which graduates of this program might work include general contracting, project management for developers, facilities management, and design-and-build architecture firms.

Program Student Learning Outcome Statement
• Demonstrate an ability to apply problem solving strategies and integrate technical knowledge.

FIRST SEMESTER
ACCT 101 Principles of Accounting I 4
ARCH 115 Architectural Graphics 3
CI 90 Construction Quality Control Management 3

SECOND SEMESTER
ARCH 165 Architectural Practice I 2
ARCH 200 Introduction to Computer Aided Design 3
CI 60 Building Codes I 3

THIRD SEMESTER
ARCH 235 Structures 3
ARCH 265 Architectural Practice II 2
CI 80 Soils Engineering 3

FOURTH SEMESTER
ARCH 266 Architectural Practice III 2
BUS 140 Business Law/The Legal Environment of Business 3
CI 65 Building Codes II 3

Total units 36

Recommended Electives: ARCH 205, 222, 290–293, CI 70.
To earn an associate degree, additional general education and graduation requirements must be completed. See page 64.

CERTIFICATES

CONSTRUCTION INSPECTION

CERTIFICATE OF ACHIEVEMENT
CAREER/TECHNICAL (MAJOR CODE: 02882)

Program Student Learning Outcome Statement
• Demonstrate the ability to apply problem solving strategies and integrate technical knowledge.

GAINFUL EMPLOYMENT:
The U.S. Department of Education requires colleges to disclose a variety of information for any financial aid eligible program that “prepares students for gainful employment in a recognized occupation.”

Students who complete this program will have acquired the necessary analytical tools to successfully secure gainful employment in the field of study.

For more information regarding the data provided for this program and what it means to you as a student, please feel free to visit our SWC Gainful Employment website at: www.swccd.edu/gainfulemployment.

FIRST SEMESTER
CI 10 Building Plans and Construction Details 3
CI 60 Building Codes I 3

SECOND SEMESTER
CI 50 Legal Factors of Construction Inspection 3
CI 65 Building Codes II 3

THIRD SEMESTER
CI 20 Inspection of Mechanical Construction 3
CI 80 Soils Engineering 3

FOURTH SEMESTER
CI 40 Electrical Inspection 3
CI 70 Inspection of Architectural Details and Structural Inspection 3

Total units 24

CONSTRUCTION MANAGEMENT

CERTIFICATE OF ACHIEVEMENT
CAREER/TECHNICAL (MAJOR CODE: 02883)

Program Student Learning Outcome Statement
• Demonstrate the ability to apply problem solving strategies and integrate technical knowledge.

GAINFUL EMPLOYMENT:
The U.S. Department of Education requires colleges to disclose a variety of information for any financial aid eligible program that “prepares students for gainful employment in a recognized occupation.”

Students who complete this program will have acquired the necessary analytical tools to successfully secure gainful employment in the field of study.

For more information regarding the data provided for this program and what it means to you as a student, please feel free to visit our SWC Gainful Employment website at: www.swccd.edu/gainfulemployment.

FIRST SEMESTER
ACCT 101 Principles of Accounting I 4
ARCH 115 Graphic Communication for Architects and Designers 3
CI 90 Construction Quality Control Management 3

SECOND SEMESTER
ARCH 165 Architectural Practice I 3
ARCH 200 Introduction to Computer Aided Design 3
CI 60 Building Codes I 3

THIRD SEMESTER
ARCH 235 Structures 3
ARCH 265 Architectural Practice II 3
CI 80 Soils Engineering 3

FOURTH SEMESTER
ARCH 209 Construction Surveying 3
ARCH 266 Architectural Practice III 2
BUS 140 Business Law/The Legal Environment of Business 3
CI 65 Building Codes II 3

Total units 39

Some courses within this program may require additional coursework that must be completed prior to enrollment in these courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.