

## ASSOCIATE IN SCIENCE DEGREE

### Computer Science

Career/Technical (Major Code: 02190)

The program of study listed below is designed for students who seek employment at the technician level in the science or mathematics fields. Completion of this program of study does not satisfy the lower-division requirements for transfer to colleges or universities. Students who plan to transfer should complete the courses listed under the Computer Science Associate in Arts degree program.

#### 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 51.*

## CERTIFICATE

### Computer Science

Certificate of Achievement

Career/Technical (Major Code: 02191)

#### 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**

# Construction Inspection

## Departments of Applied Technology, CIS/Electronics, and Administration of Justice

**Dean** Terry Davis, M.H.A., Office 1000K, 619-482-6551

**Department Chair** David Preciado, A.A.

### 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.*



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

## ASSOCIATE IN SCIENCE DEGREE

### Construction Inspection

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.

#### 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 |

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|                    |           |
|--------------------|-----------|
| <b>Total units</b> | <b>24</b> |
|--------------------|-----------|

**Recommended Elective:** CI 90.

*To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.*

### Construction Management

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.

#### First Semester

|          |                                         |   |
|----------|-----------------------------------------|---|
| ACCT 101 | Principles of Accounting I              | 4 |
| CI 60    | Building Codes I                        | 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 65    | Building Codes II                     | 3 |

#### Third Semester

|          |                           |   |
|----------|---------------------------|---|
| ARCH 235 | Structures                | 3 |
| ARCH 265 | Architectural Practice II | 2 |
| CI 80    | Soils Engineering         | 3 |

#### Fourth Semester

|          |                                                |   |
|----------|------------------------------------------------|---|
| ARCH 115 | Architectural Graphics                         | 3 |
| ARCH 266 | Architectural Practice III                     | 2 |
| BUS 140  | Business Law/The Legal Environment of Business | 3 |

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|                    |           |
|--------------------|-----------|
| <b>Total units</b> | <b>34</b> |
|--------------------|-----------|

**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 51.*

## CERTIFICATES

### Construction Inspection

Certificate of Achievement

Career/Technical (Major Code: 02882)

#### 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         |
| <b>Total units</b> |                                                               | <b>24</b> |

### Construction Management

Certificate of Achievement

Career/Technical (Major Code: 02883)

#### First Semester

|          |                                         |   |
|----------|-----------------------------------------|---|
| ACCT 101 | Principles of Accounting I              | 4 |
| CI 60    | Building Codes I                        | 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 65    | Building Codes II                     | 3 |

#### Third Semester

|          |                           |   |
|----------|---------------------------|---|
| ARCH 235 | Structures                | 3 |
| ARCH 265 | Architectural Practice II | 2 |
| CI 80    | Soils Engineering         | 3 |

#### Fourth Semester

|                    |                                                |           |
|--------------------|------------------------------------------------|-----------|
| ARCH 115           | Architectural Graphics                         | 3         |
| ARCH 209           | Construction Surveying                         | 3         |
| ARCH 266           | Architectural Practice III                     | 2         |
| BUS 140            | Business Law/The Legal Environment of Business | 3         |
| <b>Total units</b> |                                                | <b>37</b> |

## Culinary Arts

### Departments of Business, Accounting, and Office Information Systems

**Dean** Mark Meadows, Ph.D., Office 215, 619-482-6460

**Department Chair** Dick Wasson, M.B.A.

#### General Description

The Culinary Arts program has two components—the Baking and Pastry certificate and the Cooking and Baking certificate/degree programs. These programs prepare students for work in the restaurant and hospitality industry by focusing on the development of kitchen skills and food handling techniques in both the baking and culinary specialty areas. Students will understand how to work with foods and the function of ingredients, baking and cooking methods, food economics, nutrition, and kitchen safety and sanitation. A dual focus in baking and pastry as well as culinary kitchen skills is emphasized. Oral and written communications and computer literacy skills are an integral part of the program, and a work experience internship is required at the advanced certificate and associate degree levels.

#### Career Options

Students completing these certificate/degree programs can gain employment at the entry level or higher depending on their previous experience. Employment exists in bakeries, large grocery chains, cafes, restaurants, hotels, resorts, childcare facilities, cafeterias, hospitals, food preparation centers, casinos, and catering facilities. Career options in the field of baking and pastry: baker, baker assistant, bakery production finisher/supervisor, pastry chef, pastry decorator, caterer, and bakery entrepreneur. Career options in the field of Culinary: entry-level prep cook, head cook, assistant chef, chef, food service supervisor, catering manager, and restaurant entrepreneur.

#### Degree/Certificate Options

##### Associate in Science Degree

|                                   |       |
|-----------------------------------|-------|
| Culinary Arts: Cooking and Baking | 01825 |
|-----------------------------------|-------|

##### Certificate of Achievement

|                                            |       |
|--------------------------------------------|-------|
| Culinary Arts: Cooking and Baking—Advanced | 01824 |
| Professional Baking and Pastry             | 01820 |

##### Certificate of Proficiency

|                                         |       |
|-----------------------------------------|-------|
| Culinary Arts: Cooking Essentials—Basic | 01826 |
|-----------------------------------------|-------|

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



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