

## Certificate of Achievement Requirements

Complete all department requirements for the certificate with a cumulative grade point average (GPA) of 2.0 or better. Candidates for a Certificate of Achievement are required to complete at least 20% of the department requirements through SBCC.

### Department Requirements (Total Department Units: 24-27)

| <i>Current Course No.</i> | <i>Previous Course No.</i>        | <i>Title</i>                                     | <i>Units</i> | <i>Institution &amp; Course No.</i> | <i>Grade</i> | <i>Units (s/q)</i> | <i>Term</i> |
|---------------------------|-----------------------------------|--|--------------|-------------------------------------|--------------|--------------------|-------------|
| • COMP 101                | ..... (COMAP 101/OIS 142&CIS 109) | .....Introduction to Computer Applications       | .....4.0     | _____                               | _____        | _____              | _____       |
| • WTRS 101                | ..... (WTRSC 101/14)              | .....Water Distribution Systems <b>OR</b>        | .....3.0     | _____                               | _____        | _____              | _____       |
| • WTRS 110                | ..... (WTRSC 110/11)              | .....Basic Water Treatment                       | .....3.0     | _____                               | _____        | _____              | _____       |
| • WTRS 103                | ..... (WTRSC 103/18)              | .....Pump and Motor Operation & Maintenance      | .....3.0     | _____                               | _____        | _____              | _____       |
| • WTRS 105                | ..... (WTRSC 105/21)              | .....Water Science Chemistry and Bacteriology    | .....3.0     | _____                               | _____        | _____              | _____       |
| • WTRS 113                | ..... (WTRSC 113/17)              | .....Water and Wastewater Hydraulics             | .....3.0     | _____                               | _____        | _____              | _____       |
| • WTRS 117                | ..... (WTRSC 117/26)              | .....Water and Wastewater Calculations <b>OR</b> | .....3.0     | _____                               | _____        | _____              | _____       |
| MATH 095                  | ..... (100/7)                     | .....Elementary Algebra                          | .....5.0     | _____                               | _____        | _____              | _____       |

*Plus select two courses from the following:*

|             |                      |   |          |       |       |       |       |
|-------------|----------------------|---|----------|-------|-------|-------|-------|
| • EARTH 171 | ..... (EARTH 171)    | .....Introduction to GIS and Maps <b>OR</b>     | .....2.0 | _____ | _____ | _____ | _____ |
| GEOG 171    | ..... (none)         | .....Introduction to GIS and Maps               | .....2.0 | _____ | _____ | _____ | _____ |
| • WTRS 101* | ..... (WTRSC 101/14) | .....Water Distribution Systems                 | .....3.0 | _____ | _____ | _____ | _____ |
| • WTRS 102  | ..... (WTRSC 102/15) | .....Water Systems Instrumentation and Controls | .....3.0 | _____ | _____ | _____ | _____ |
| • WTRS 106  | ..... (WTRSC 106/22) | .....Groundwater Production and Protection      | .....3.0 | _____ | _____ | _____ | _____ |
| • WTRS 110* | ..... (WTRSC 110/11) | .....Basic Water Treatment                      | .....3.0 | _____ | _____ | _____ | _____ |
| • WTRS 112  | ..... (WTRSC 112/16) | .....Water Qual. Protec& Cross Connect. Control | .....3.0 | _____ | _____ | _____ | _____ |
| • WTRS 114  | ..... (WTRSC 114/23) | .....Advanced Wastewater Treatment              | .....3.0 | _____ | _____ | _____ | _____ |
| • WTRS 116  | ..... (WTRSC 116/25) | .....Water and Wastewater Management            | .....3.0 | _____ | _____ | _____ | _____ |

\*NOTE: WTRS 101 and 110 can only satisfy the core requirement or the elective requirement, not both.

### **Additional Program Information**

For further information, contact the Counseling Center, 965-0581, Ext. 2285, or Alan Price, Technologies Division Dean, 965-0581, Ext. 3044.

**Associate Degrees and Certificates of Achievement (In alphabetical order) - For a complete list of programs of study (associate degrees, certificates, skills competency awards and department awards) and requirements, go to [http://www.sbcc.edu/apply/degrees\\_certificates.php](http://www.sbcc.edu/apply/degrees_certificates.php).**

|  |  |
|--|--|
| Accounting (AS)  | Health Information Technology (AS)                                     |
| Accounting/Assistant Bookkeeper IV (C)                                   | Healthy Aging (AA)   |
| Administration of Justice (AA/AS/C)-3 emph. avail (AS&C), 1(AA)          | History (AA)   |
| Administration of Justice for Transfer (AS-T)                            | History for Transfer (AA-T)  |
| Alcohol and Drug Counseling (AA/C)                                       | Honors (C/C with highest honors) – 2 emphases available                |
| American Sign Language (AA)  | Hospitality (AS/C)   |
| Animation and Gaming (AA/C)  | Infant/Toddler Development (C)   |
| Anthropology (AA)  | Interior Design (AA/C)   |
| Anthropology for Transfer (AA-T)   | International Business (AA/C)  |
| Applied Photography (AA/C)   | Introduction to Graphic Design (C)                                     |
| Art (AA) - 2 emphases available  | Journalism (AA/C)  |
| Art History for Transfer (AA-T)  | Journalism for Transfer (AA-T)   |
| Associate Child Care Teacher (C)   | Kinesiology for Transfer (AA-T)  |
| Automotive Services & Technology (AS/C)                                  | Law & Society (AA) - Emphasis in Criminal Justice available            |
| Biological Sciences (AA)   | Liberal Arts (AA) – Emphasis in Biomedical Sciences                    |
| Black Studies (AA)   | Liberal Arts & Sciences (AA) – 3 emphases available                    |
| Business Administration (AA/C) – 3 emphases available for AA, 2 for C    | Liberal Studies (AA) – Emphasis in Education                           |
| Business Administration for Transfer (AS-T)                              | Marine Diving Technician (AS/C)  |
| Cancer Information Management (AS/C)                                     | Marketing (AA/C)   |
| Chemistry (AA)   | Mathematics (AA)   |
| Chicano Studies (AA)   | Mathematics for Transfer (AS-T)  |
| Commercial Music (C)   | Media Arts (AA/C)  |
| Communication (AA) - 2 emphases available                                | Medical Coding Specialist (C)  |
| Communication Studies for Transfer (AA-T)                                | Middle East Studies (AA)   |
| Computer App. & Office Mgmt (AS/C) - 2 emphases available                | Music (AA)   |
| Computer Information Systems (AS) – Emph. in System Admin. available     | Native American Studies (AA)   |
| Computer Network Engineering (AS/C)                                      | Natural History (AA)   |
| Computer Science (AS/C)  | Nursing - ADN (AS)   |
| Construction Technology (AS/C)   | PC Support/Network Management (C)                                      |
| Cosmetology (AS/C)   | Philosophy (AA)  |
| Creative Writing (C) – 2 emphases available                              | Philosophy for Transfer (AA-T)   |
| Culinary Arts (AS/C)   | Physical Education (AA) – Emphasis in Athletic/Personal Fitness avail. |
| Database Programming and Applications Development (C)                    | Physics (AA/AS)  |
| Diagnostic Medical Sonography (C)  | Physics for Transfer (AS-T)  |
| Diversity Issues in ECE (C)  | Political Science (AA)   |
| Drafting/CAD (AS/C)  | Political Science for Transfer (AA-T)                                  |
| Early Childhood Education (AS/C)   | Post-Professional Practice in ADC (C)                                  |
| Early Childhood Education for Transfer (AS-T)                            | Psychology (AA)  |
| Economics (AA)   | Psychology for Transfer (AA-T)   |
| Economics for Transfer (AA-T)  | Radiography (AS)   |
| Elementary Teacher Education (AA-T)                                      | Real Estate (AS/C)   |
| Engineering (AA/AS)  | School-Age Care (C)  |
| English (AA)   | Sociology (AA)   |
| English for Transfer (AA-T)  | Sociology for Transfer (AA-T)  |
| Environmental Horticulture (AS/C) - 4 emphases available for AS, 1 for C | Spanish (AA)   |
| Environmental Studies (AA)   | Spanish for Transfer (AS-T)  |
| Ethnic Studies (AA)  | Studio Arts for Transfer (AA-T)  |
| Film Production (AA)   | Theatre Arts (AA) - 3 emphases available                               |
| Film and Media Studies (AA)  | Theatre Arts for Transfer (AA-T)                                       |
| Finance (AA/C)   | Transfer – CSU General Education Breadth Pattern (C)                   |
| French (AA)  | Transfer – IGETC (C)   |
| Geography (AA)   | Vocational Nursing (AS/C)  |
| Geography for Transfer (AA-T)  | Wastewater Technology Education (C)                                    |
| Geological Sciences (AS)   | Water Technology Education (C)   |
| Geology for Transfer (AS-T)  |  |
| Global Studies (AA)  |  |
| Graphic Design & Photography – Graphic Design Conc. (AA/C)               |  |

**Key: (AA)=Associate in Arts; (AA-T)=Associate in Arts for Transfer; (AS)=Associate in Science; (AS-T)= Associate in Science for Transfer; (C)=Certificate of Achievement**



**Santa Barbara City College**

# Water Technology Education

**2016-17**

## Certificate of Achievement in Water Technology Education

The goal of this program is to qualify students to operate water or wastewater facilities according to state and federal regulations. Courses are designed to prepare students to take state and federal exams which, when successfully passed, lead to specific job titles and levels of responsibility in water or wastewater fields.

### Careers in Water Technology Education

The Water Technology Certificates are designed to introduce the students to careers in water treatment, water supply and distribution, wastewater treatment and water collection.

***SBCC: Your Open Door to Educational Excellence***