

Information Technology (A25590)

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

COURSE REQUIREMENTS

Richmond Community College provides day and evening course sequences for selected programs to enable students to better plan what courses to take to reach their educational goals. However, given the continued increase in the use of technology in instruction and increasing student demand for distance learning courses, the College may offer hybrid, online, web-based and information highway courses in place of traditional courses in any course sequence that is listed. Therefore, students should be aware of this possibility and prepare themselves to successfully function in a hybrid, online, web-based, or information highway course.

CYBER SECURITY (A25590A) COURSE REQUIREMENTS

| | | | | Class | Lab | Work/ Clinical | Credit |
|---|-----|--------------------------------------|--|-------|-----|-------------------|--------|
| A. General Education Courses | | | | | | | |
| 1. Required Courses | | | | | | | |
| ENG | 111 | Writing and Inquiry | | 3 | 0 | 0 | 3 |
| COM | 231 | Public Speaking | | 3 | 0 | 0 | 3 |
| or | | | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | | 3 | 0 | 0 | 3 |
| B. Major Courses | | | | | | | |
| 1. Core Courses | | | | | | | |
| <i>To receive a degree, diploma or certificate from RCC, a student must have a grade of "C" or better in all core courses for the program of study.</i> | | | | | | | |
| CTI | 110 | Web, Pgm, & DB Foundation | | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | | 3 | 0 | 0 | 3 |

| | | | | | | |
|----------------------------------|-----|-----------------------------------|-----|-----|----|---|
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| 2. Other Major Courses | | | | | | |
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| or | | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| and | | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| | | IT Major Elective** | 1-3 | 0-3 | 0 | 4 |
| C. Other Required Courses | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |

Total Credit Hours

64-65

*Approved Humanities/Fine Arts and Social/Behavioral Sciences Electives are listed on the page before the Course Descriptions.

**Approved IT Electives may be selected from courses listed below. Cyber Security students must choose a total of 4 credit hours from this list. Only 3 SCH of SPA are allowed towards the Information Technology degree:

| | | | | | | |
|-----|-----|------------------------------------|---|---|---|---|
| ACC | 115 | College Accounting | 3 | 2 | 0 | 4 |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 0 | 4 |
| BUS | 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS | 125 | Personal Finance | 3 | 0 | 0 | 3 |
| BUS | 137 | Principles of Management | 3 | 0 | 0 | 3 |
| BUS | 139 | Entrepreneurship I | 3 | 0 | 0 | 3 |
| BUS | 230 | Small Business Management | 3 | 0 | 0 | 3 |
| BUS | 260 | Business Communications | 3 | 0 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CSC | 153 | C# Programming | 2 | 3 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 130 | Spreadsheet | 2 | 2 | 0 | 3 |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 0 | 3 |

| | | | | | | |
|-----|-----|--------------------------------|---|---|---|---|
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| HMT | 110 | Intro to Healthcare Management | 3 | 0 | 0 | 3 |
| HMT | 210 | Medical Insurance | 3 | 0 | 0 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| MKT | 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| MKT | 223 | Customer Service | 3 | 0 | 0 | 3 |
| OST | 136 | Word Processing | 2 | 2 | 0 | 3 |
| OST | 137 | Office Software Applications | 2 | 2 | 0 | 3 |
| PMT | 110 | Intro to Project Management | 3 | 0 | 0 | 3 |
| PMT | 210 | Project Management Issues | 2 | 2 | 0 | 3 |
| PMT | 215 | Project Management Leadership | 3 | 0 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |

**SEMESTER SCHEDULE
CYBER SECURITY (A25590A)**

| | | | Work/ | | | |
|-------------------------------------|-----|---------------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| First Year — Fall Semester | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CIS | 115 | Introduction to Programming and Logic | 2 | 3 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| | | | — | — | — | — |
| | | | 8 | 12 | 0 | 13 |
| First Year — Spring Semester | | | | | | |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 10 | 11 | 0 | 15 |
| First Year — Summer Semester | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 2 | 0 | 12 |
| Second Year — Fall Semester | | | | | | |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |

| | | | | | | |
|--------------------------------------|-----|-------------------------------------|-----|------|------|-------|
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| | | | 8 | 8 | 0 | 12 |
| Second Year — Spring Semester | | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| or | | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| or | | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| and | | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| | | IT Major Elective** | 1-3 | 0-3 | 0 | 4 |
| | | | 7-9 | 3-10 | 0-10 | 12-13 |

Total Credit Hours

64-65

*Approved Humanities/Fine Arts and Social/Behavioral Sciences Electives are listed on the page before the Course Descriptions.

**Approved IT Electives may be selected from courses listed above.

**CYBER SECURITY (DIPLOMA) (D25590A)
COURSE REQUIREMENTS**

| | | | Class | Lab | Work/ Clinical | Credit |
|-----|-----|-------------------------------------|-------|-----|-------------------|--------|
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| or | | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |

| | | | | | | |
|---------------------------|-----|---------------------------|---|---|-----------|---|
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| Total Credit Hours | | | | | 46 | |

**CYBER SECURITY TECHNICIAN (CERTIFICATE) (C25590A1)
COURSE REQUIREMENTS**

| | | | Class | Lab | Work/ Clinical | Credit |
|---------------------------|-----|-------------------------------|--------------|------------|---------------------------|---------------|
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| Total Credit Hours | | | 12 | 15 | 0 | 18 |

**SECURITY+ PREP (CERTIFICATE) (C25590A2)
COURSE REQUIREMENTS**

| | | | Class | Lab | Work/ Clinical | Credit |
|---------------------------|-----|-------------------------------|--------------|------------|---------------------------|---------------|
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| Total Credit Hours | | | 8 | 9 | 0 | 12 |

Note: Security+ Prep (C25590A2) is a subset of the Cyber Security Technician (C25590A1) certificate. Students using financial aid should enroll in Cyber Security Technician (C25590A1).

CYBER SECURITY (A25590A) (ONLINE) COURSE REQUIREMENTS

Students must meet eligibility to take college-level coursework through placement tests or other measures. Please see the student handbook for further information.

| | | Class | Lab | Work/ Clinical | Credit |
|---|-----|--------------------------------------|-----|-------------------|--------|
| A. General Education Courses | | | | | |
| 1. Required Courses | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 3 |
| COM | 231 | Public Speaking | 3 | 0 | 0 3 |
| or | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 3 |
| B. Major Courses | | | | | |
| 1. Core Courses | | | | | |
| <i>To receive a degree, diploma or certificate from RCC, a student must have a grade of "C" or better in all core courses for the program of study.</i> | | | | | |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 3 |
| 2. Other Major Courses | | | | | |
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 3 |
| or | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 1 |
| and | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 1 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 3 |
| | | IT Major Elective** | 1-3 | 0-3 | 0 4 |
| C. Other Required Courses | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 1 |

Total Credit Hours

64-65

*Approved Humanities/Fine Arts electives offered online: ART 111, ENG 231, MUS 110, PHI 240, REL 211, REL 212.

*Approved Social/Behavioral Sciences electives offered online: ANT 220, HIS 131, HIS 132, HIS 236, POL 120, PSY 150, PSY 241, SOC 210, SOC 213.

**Approved IT electives offered online may be selected from courses listed below. Cyber Security students must choose a total of 4 credit hours from this list. Only 3 SCH of SPA are allowed towards the Information Technology degree:

| | | | | | | |
|-----|-----|------------------------------------|---|---|---|---|
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 0 | 4 |
| BUS | 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS | 125 | Personal Finance | 3 | 0 | 0 | 3 |
| BUS | 137 | Principles of Management | 3 | 0 | 0 | 3 |
| BUS | 139 | Entrepreneurship I | 3 | 0 | 0 | 3 |
| BUS | 230 | Small Business Management | 3 | 0 | 0 | 3 |
| BUS | 260 | Business Communications | 3 | 0 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CSC | 153 | C# Programming | 2 | 3 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 130 | Spreadsheet | 2 | 2 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| HMT | 110 | Intro to Healthcare Management | 3 | 0 | 0 | 3 |
| HMT | 210 | Medical Insurance | 3 | 0 | 0 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| MKT | 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| OST | 136 | Word Processing | 2 | 2 | 0 | 3 |
| OST | 137 | Office Software Applications | 2 | 2 | 0 | 3 |
| PMT | 110 | Intro to Project Management | 3 | 0 | 0 | 3 |
| PMT | 210 | Project Management Issues | 2 | 2 | 0 | 3 |
| PMT | 215 | Project Management Leadership | 3 | 0 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |

**SEMESTER SCHEDULE
CYBER SECURITY (A25590A) (ONLINE)**

| | | | Class | Lab | Work/ Clinical | Credit |
|-----------------------------------|-----|---------------------------------------|-------|-----|-------------------|--------|
| First Year — Fall Semester | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CIS | 115 | Introduction to Programming and Logic | 2 | 3 | 0 | 3 |

| | | | | | | |
|--------------------------------------|-----|--------------------------------------|-----|------|--------------|-------|
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| | | | — | — | — | — |
| | | | 8 | 12 | 0 | 13 |
| First Year — Spring Semester | | | | | | |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 10 | 11 | 0 | 15 |
| First Year — Summer Semester | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 2 | 0 | 12 |
| Second Year — Fall Semester | | | | | | |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 8 | 8 | 0 | 12 |
| Second Year — Spring Semester | | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | | or | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| | | or | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| | | and | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| | | IT Major Elective** | 1-3 | 0-3 | 0 | 4 |
| | | | — | — | — | — |
| | | | 7-9 | 3-10 | 0-10 | 12-13 |
| Total Credit Hours | | | | | 64-65 | |

*Approved Humanities/Fine Arts electives offered online:

ART 111, ENG 231, MUS 110, PHI 240, REL 211, REL 212

*Approved Social/Behavioral Sciences electives offered online:

ANT 220, HIS 131, HIS 132, HIS 236, POL 120, PSY 150, PSY 241, SOC 210, SOC 213
 **Approved IT Electives may be selected from courses listed above.

**CYBER SECURITY (DIPLOMA) (D25590A) (ONLINE)
 COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-------------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | | or | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| Total Credit Hours | | | | | 46 | |

**CYBER SECURITY TECHNICIAN (CERTIFICATE) (C25590A1) (ONLINE)
 COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 15 | 0 | 18 |
| Total Credit Hours | | | | | 18 | |

**SECURITY+ PREP (CERTIFICATE) (C25590A2) (ONLINE)
COURSE REQUIREMENTS**

| | | | Class | Lab | Work/ Clinical | Credit |
|-----|-----|-------------------------------|--------------|------------|---------------------------|---------------|
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | | 8 | 9 | 0 | 12 |

Total Credit Hours

12

Note: Security+ Prep (C25590A2) is a subset of the Cyber Security Technician (C25590A1) certificate. Students using financial aid should enroll in Cyber Security Technician (C25590A1).

The courses listed on this program guide are the courses currently offered online through Richmond Community College. Please speak to your advisor if you have taken courses at another college or university.

The following courses are part of the North Carolina Articulation Agreement: ACC 120, ART 111, BUS 110, BUS 115, BUS 137, CIS 110, CIS 115, COM 231, CSC 151, ECO 251, ECO 252, ENG 111, ENG 112, ENG 231, ENG 232, MAT 143, MUS 110, PHI 240, and SPA 111. The North Carolina Comprehensive Articulation Agreement is a statewide agreement governing transfer credits from North Carolina community colleges to North Carolina public universities and participating private universities. RichmondCC cannot guarantee the transfer of courses to out-of-state universities.

INFORMATION TECHNOLOGY SUPPORT (A25590B) COURSE REQUIREMENTS

| | | | Class | Lab | Work/ Clinical | Credit | |
|---|-----|--------------------------------------|--------|--------|-------------------|--------|--|
| A. General Education Courses | | | | | | | |
| 1. Required Courses | | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 | |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 | |
| | | or | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 | |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 | |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 | |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 | |
| B. Major Courses | | | | | | | |
| 1. Core Courses | | | | | | | |
| <i>To receive a degree, diploma or certificate from RCC, a student must have a grade of "C" or better in all core courses for the program of study.</i> | | | | | | | |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 | |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 | |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 | |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 | |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 | |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 | |
| 2. Other Major Courses | | | | | | | |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 | |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 | |
| | | or | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 | |
| | | and | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 | |
| DBA | 110 | Database Concepts | 2 | 3 | 0 | 3 | |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 | |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 | |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 | |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 | |
| PMT | 110 | Intro to Project Management | 3 | 0 | 0 | 3 | |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 | |
| | | IT Major Elective** | Varies | Varies | 0 | 4 | |
| C. Other Required Courses | | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 | |

Total Credit Hours

64-65

*Approved Humanities/Fine Arts and Social/Behavioral Sciences Electives are listed on the page before the Course Descriptions.

**Approved IT Electives may be selected from courses listed below. IT Support students must choose a total of 4 credit hours from this list. Only 3 SCH of SPA are allowed towards the Information Technology degree:

| | | | | | | |
|-----|-----|---------------------------------------|---|---|---|---|
| ACC | 115 | College Accounting | 3 | 2 | 0 | 4 |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 0 | 4 |
| BUS | 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS | 125 | Personal Finance | 3 | 0 | 0 | 3 |
| BUS | 137 | Principles of Management | 3 | 0 | 0 | 3 |
| BUS | 139 | Entrepreneurship I | 3 | 0 | 0 | 3 |
| BUS | 230 | Small Business Management | 3 | 0 | 0 | 3 |
| BUS | 260 | Business Communications | 3 | 0 | 0 | 3 |
| CIS | 115 | Introduction to Programming and Logic | 2 | 3 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CSC | 153 | C# Programming | 2 | 3 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 130 | Spreadsheet | 2 | 2 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| HMT | 110 | Intro to Healthcare Management | 3 | 0 | 0 | 3 |
| HMT | 210 | Medical Insurance | 3 | 0 | 0 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| MKT | 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| MKT | 223 | Customer Service | 3 | 0 | 0 | 3 |
| OST | 137 | Office Software Applications | 2 | 2 | 0 | 3 |
| PMT | 210 | Project Management Issues | 2 | 2 | 0 | 3 |
| PMT | 215 | Project Management Leadership | 3 | 0 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |

**SEMESTER SCHEDULE
INFORMATION TECHNOLOGY SUPPORT (A25590B)**

| | | | Work/ Class Lab ClinicalCredit | | | |
|-----------------------------------|-----|-------------------------------|---|---|---|---|
| First Year — Fall Semester | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |

| | | | | | | |
|--------------------------------------|-----|--------------------------------------|-----|------|------|-------|
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| | | | — | — | — | — |
| | | | 8 | 11 | 0 | 13 |
| First Year — Spring Semester | | | | | | |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 10 | 11 | 0 | 15 |
| First Year — Summer Semester | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 2 | 0 | 12 |
| Second Year — Fall Semester | | | | | | |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| PMT | 110 | Intro to Project Management | 3 | 0 | 0 | 3 |
| | | | — | — | — | — |
| | | | 9 | 6 | 0 | 12 |
| Second Year — Spring Semester | | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | | or | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| | | or | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| | | and | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| DBA | 110 | Database Concepts | 2 | 3 | 0 | 3 |
| | | IT Major Elective** | 1-3 | 0-3 | 0 | 4 |
| | | | — | — | — | — |
| | | | 7-9 | 3-10 | 0-10 | 12-13 |

Total Credit Hours

64-65

*Approved Humanities/Fine Arts and Social/Behavioral Sciences Electives are listed on the page before the Course Descriptions.

**Approved IT Electives may be selected from courses listed above.

**IT SUPPORT (DIPLOMA) (D25590B)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-------------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| or | | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| Total Credit Hours | | | | | 46 | |

**IT – ENTRY LEVEL COMPUTER TECHNICIAN (CERTIFICATE) (C25590B1)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|--------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 16 | 0 | 18 |
| Total Credit Hours | | | | | 18 | |

**IT – A+ PREP (CERTIFICATE) (C25590B2)
COURSE REQUIREMENTS**

| | | | Class | Lab | Work/ Clinical | Credit |
|-----|-----|--------------------------------|--------------|------------|---------------------------|---------------|
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 8 | 10 | 0 | 12 |

Total Credit Hours

12

Note: A+ Prep (C25590B2) is a subset of the Entry Level Computer Technician (C25590B1) certificate. Students using financial aid should enroll in Entry Level Computer Technician (C25590B1).

INFORMATION TECHNOLOGY SUPPORT (A25590B) (ONLINE) COURSE REQUIREMENTS

| | | | Class | Lab | Work/ Clinical | Credit | |
|---|-----|--------------------------------------|--------|--------|-------------------|--------|--|
| A. General Education Courses | | | | | | | |
| 1. Required Courses | | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 | |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 | |
| | | or | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 | |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 | |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 | |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 | |
| B. Major Courses | | | | | | | |
| 1. Core Courses | | | | | | | |
| <i>To receive a degree, diploma or certificate from RCC, a student must have a grade of "C" or better in all core courses for the program of study.</i> | | | | | | | |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 | |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 | |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 | |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 | |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 | |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 | |
| 2. Other Major Courses | | | | | | | |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 | |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 | |
| | | or | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 | |
| | | and | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 | |
| DBA | 110 | Database Concepts | 2 | 3 | 0 | 3 | |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 | |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 | |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 | |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 | |
| PMT | 110 | Intro to Project Management | 3 | 0 | 0 | 3 | |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 | |
| | | IT Major Elective** | Varies | Varies | 0 | 4 | |
| C. Other Required Courses | | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 | |

Total Credit Hours

64-65

*Approved Humanities/Fine Arts electives offered online: ART 111, ENG 231, MUS 110, PHI 240, REL 211, REL 212.

*Approved Social/Behavioral Sciences electives offered online: ANT 220, HIS 131, HIS 132, HIS 236, POL 120, PSY 150, PSY 241, SOC 210, SOC 213.

**Approved IT Electives may be selected from courses listed below. IT Support students must choose a total of 4 credit hours from this list. Only 3 SCH of SPA are allowed towards the Information Technology degree:

| | | | | | | |
|-----|-----|---------------------------------------|---|---|---|---|
| ACC | 115 | College Accounting | 3 | 2 | 0 | 4 |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 0 | 4 |
| BUS | 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS | 125 | Personal Finance | 3 | 0 | 0 | 3 |
| BUS | 137 | Principles of Management | 3 | 0 | 0 | 3 |
| BUS | 139 | Entrepreneurship I | 3 | 0 | 0 | 3 |
| BUS | 230 | Small Business Management | 3 | 0 | 0 | 3 |
| BUS | 260 | Business Communications | 3 | 0 | 0 | 3 |
| CIS | 115 | Introduction to Programming and Logic | 2 | 3 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CSC | 153 | C# Programming | 2 | 3 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 130 | Spreadsheet | 2 | 2 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| HMT | 110 | Intro to Healthcare Management | 3 | 0 | 0 | 3 |
| HMT | 210 | Medical Insurance | 3 | 0 | 0 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| MKT | 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| MKT | 223 | Customer Service | 3 | 0 | 0 | 3 |
| OST | 137 | Office Software Applications | 2 | 2 | 0 | 3 |
| PMT | 210 | Project Management Issues | 2 | 2 | 0 | 3 |
| PMT | 215 | Project Management Leadership | 3 | 0 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |

**SEMESTER SCHEDULE
INFORMATION TECHNOLOGY SUPPORT (A25590B) (ONLINE)**

| | | | Work/ | | | |
|-----------------------------------|-----|--------------------------|-------|-----|----------|--------|
| | | | Class | Lab | Clinical | Credit |
| First Year — Fall Semester | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |

| | | | | | | |
|--------------------------------------|-----|--------------------------------------|-----|------|--------------|-------|
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| | | | — | — | — | — |
| | | | 8 | 11 | 0 | 13 |
| First Year — Spring Semester | | | | | | |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 10 | 11 | 0 | 15 |
| First Year — Summer Semester | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 2 | 0 | 12 |
| Second Year — Fall Semester | | | | | | |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| PMT | 110 | Intro to Project Management | 3 | 0 | 0 | 3 |
| | | | — | — | — | — |
| | | | 9 | 6 | 0 | 12 |
| Second Year — Spring Semester | | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | or | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| | or | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| | and | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| DBA | 110 | Database Concepts | 2 | 3 | 0 | 3 |
| | | IT Major Elective** | 1-3 | 0-3 | 0 | 4 |
| | | | — | — | — | — |
| | | | 7-9 | 3-10 | 0-10 | 12-13 |
| Total Credit Hours | | | | | 64-65 | |

*Approved Humanities/Fine Arts electives offered online: ART 111, ENG 231, MUS 110, PHI 240, REL 211, REL 212.

*Approved Social/Behavioral Sciences electives offered online: ANT 220, HIS 131, HIS 132, HIS 236, POL 120, PSY 150, PSY 241, SOC 210, SOC 213.

**Approved IT Electives may be selected from courses listed above.

**IT SUPPORT (DIPLOMA) (D25590B) (ONLINE)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-------------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | | or | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| Total Credit Hours | | | | | 46 | |

**IT – ENTRY LEVEL COMPUTER TECHNICIAN (CERTIFICATE) (C25590B1)
(ONLINE)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|--------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 16 | 0 | 18 |
| Total Credit Hours | | | | | 18 | |

IT – A+ PREP (CERTIFICATE) (C25590B2) (ONLINE)
COURSE REQUIREMENTS

| | | | Class | Lab | Work/ Clinical | Credit |
|-----|-----|--------------------------------|--------------|------------|---------------------------|---------------|
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| CTS | 220 | Advanced Hard/Software Support | 2 | 3 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 8 | 10 | 0 | 12 |

Total Credit Hours

12

Note: A+ Prep (C25590B2) is a subset of the Entry Level Computer Technician (C25590B1) certificate. Students using financial aid should enroll in Entry Level Computer Technician (C25590B1).

SOFTWARE AND WEB DEVELOPMENT (A25590C) COURSE REQUIREMENTS

| | | | Class | Lab | Work/ Clinical | Credit |
|---|-----|--------------------------------------|-------|-----|-------------------|--------|
| A. General Education Courses | | | | | | |
| 1. Required Courses | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| or | | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| B. Major Courses | | | | | | |
| 1. Core Courses | | | | | | |
| <i>To receive a degree, diploma or certificate from RCC, a student must have a grade of "C" or better in all core courses for the program of study.</i> | | | | | | |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| 2. Other Major Courses | | | | | | |
| CIS | 115 | Introduction to Programming Logic | 2 | 2 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| or | | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| and | | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |
| | | IT Major Elective** | 2-3 | 0-3 | 0 | 4 |
| C. Other Required Courses | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |

Total Credit Hours

64-65

*Approved Humanities/Fine Arts and Social/Behavioral Sciences Electives are listed on the page before the Course Descriptions.

**Approved IT Electives may be selected from courses listed below. Software and Web Development students must choose a total of 4 credit hours from this list. Only 3 SCH of SPA are allowed towards the Information Technology degree:

| | | | | | | |
|-----|-----|------------------------------------|---|---|---|---|
| ACC | 115 | College Accounting | 3 | 2 | 0 | 4 |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 0 | 4 |
| BUS | 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS | 125 | Personal Finance | 3 | 0 | 0 | 3 |
| BUS | 137 | Principles of Management | 3 | 0 | 0 | 3 |
| BUS | 139 | Entrepreneurship I | 3 | 0 | 0 | 3 |
| BUS | 230 | Small Business Management | 3 | 0 | 0 | 3 |
| BUS | 260 | Business Communications | 3 | 0 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| CSC | 153 | C# Programming | 2 | 3 | 0 | 3 |
| CTS | 130 | Spreadsheet | 2 | 2 | 0 | 3 |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| DBA | 110 | Database Concepts | 2 | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| HMT | 110 | Intro to Healthcare Management | 3 | 0 | 0 | 3 |
| HMT | 210 | Medical Insurance | 3 | 0 | 0 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| MKT | 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| MKT | 223 | Customer Service | 3 | 0 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| OST | 136 | Word Processing | 2 | 2 | 0 | 3 |
| OST | 137 | Office Software Applications | 2 | 2 | 0 | 3 |
| PMT | 110 | Intro to Project Management | 3 | 0 | 0 | 3 |
| PMT | 210 | Project Management Issues | 2 | 2 | 0 | 3 |
| PMT | 215 | Project Management Leadership | 3 | 0 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 0 | 3 |

**SEMESTER SCHEDULE
SOFTWARE AND WEB DEVELOPMENT (A25590C)**

| | | | Work/ | | | |
|-----------------------------------|-----|-----------------------------------|-------|-----|----------|--------|
| | | | Class | Lab | Clinical | Credit |
| First Year — Fall Semester | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |

| | | | | | | |
|-----|-----|--------------------------------------|-----|------|------|-------|
| | | | — | — | — | — |
| | | | 8 | 12 | 0 | 13 |
| | | First Year — Spring Semester | | | | |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| | | | — | — | — | — |
| | | | 8 | 10 | 0 | 12 |
| | | First Year — Summer Semester | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 2 | 0 | 12 |
| | | Second Year — Fall Semester | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | | or | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 9 | 0 | 15 |
| | | Second Year — Spring Semester | | | | |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| | | or | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| | | and | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |
| | | IT Major Elective** | 2-3 | 0-3 | 0 | 4 |
| | | | — | — | — | — |
| | | | 7-8 | 5-12 | 0-10 | 12-13 |

Total Credit Hours

64-65

*Approved Humanities/Fine Arts and Social/Behavioral Sciences Electives are listed on the page before the Course Descriptions.

**Approved IT Electives may be selected from courses listed above.

| | | | | | | |
|---------------------------|-----|-------------------------------|----|----|-----------|----|
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| | | | — | — | — | — |
| | | | 12 | 16 | 0 | 18 |
| Total Credit Hours | | | | | 18 | |

**MOBILE APPLICATIONS DEVELOPMENT SPECIALIST (CERTIFICATE)
(C25590C3)
COURSE REQUIREMENTS**

| | | | Class | Lab | Work/ Clinical | Credit |
|---------------------------|-----|-----------------------------------|--------------|------------|---------------------------|---------------|
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 12 | 15 | 0 | 18 |
| Total Credit Hours | | | | | 18 | |

SOFTWARE AND WEB DEVELOPMENT (A25590C) (ONLINE) COURSE REQUIREMENTS

Students must meet eligibility to take college-level coursework through placement tests or other measures. Please see the student handbook for further information.

| | | | Class | Lab | Work/ Clinical | Credit |
|---|-----|--------------------------------------|--------|--------|-------------------|--------|
| A. General Education Courses | | | | | | |
| 1. Required Courses | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| or | | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| B. Major Courses | | | | | | |
| 1. Core Courses | | | | | | |
| <i>To receive a degree, diploma or certificate from RCC, a student must have a grade of "C" or better in all core courses for the program of study.</i> | | | | | | |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| 2. Other Major Courses | | | | | | |
| CIS | 115 | Introduction to Programming Logic | 2 | 2 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| or | | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| and | | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |
| | | IT Major Elective** | Varies | Varies | 0 | 4 |
| C. Other Required Courses | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |

Total Credit Hours

64-65

*Approved Humanities/Fine Arts electives offered online: ART 111, ENG 231, MUS 110, PHI 240, REL 211, REL 212.

*Approved Social/Behavioral Sciences electives offered online: ANT 220, HIS 131, HIS 132, HIS 236, POL 120, PSY 150, PSY 241, SOC 210, SOC 213.

**Approved IT Major Electives offered online may be selected from courses listed below. Software and Web Development students must choose a total of 4 credit hours from this list.

Note: Only 3 SCH of SPA are allowed towards the Information Technology degree:

| | | | | | | |
|-----|-----|------------------------------------|---|---|---|---|
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 0 | 4 |
| BUS | 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS | 125 | Personal Finance | 3 | 0 | 0 | 3 |
| BUS | 137 | Principles of Management | 3 | 0 | 0 | 3 |
| BUS | 139 | Entrepreneurship I | 3 | 0 | 0 | 3 |
| BUS | 230 | Small Business Management | 3 | 0 | 0 | 3 |
| BUS | 260 | Business Communications | 3 | 0 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| CSC | 153 | C# Programming | 2 | 3 | 0 | 3 |
| CTS | 130 | Spreadsheet | 2 | 2 | 0 | 3 |
| DBA | 110 | Database Concepts | 2 | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| HMT | 110 | Intro to Healthcare Management | 3 | 0 | 0 | 3 |
| HMT | 210 | Medical Insurance | 3 | 0 | 0 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| MKT | 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| OST | 136 | Word Processing | 2 | 2 | 0 | 3 |
| OST | 137 | Office Software Applications | 2 | 2 | 0 | 3 |
| PMT | 110 | Intro to Project Management | 3 | 0 | 0 | 3 |
| PMT | 210 | Project Management Issues | 2 | 2 | 0 | 3 |
| PMT | 215 | Project Management Leadership | 3 | 0 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 0 | 3 |

**SEMESTER SCHEDULE
SOFTWARE AND WEB DEVELOPMENT (A25590C) (ONLINE)**

| | | | | Work/ | | |
|-----------------------------------|-----|-----------------------------------|------------|-----------------|---------------|---|
| | | Class | Lab | Clinical | Credit | |
| First Year — Fall Semester | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 | 3 |

| | | | | | | |
|--------------------------------------|-----|--------------------------------------|-----|--------------|------|-------|
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| | | | — | — | — | — |
| | | | 8 | 12 | 0 | 13 |
| First Year — Spring Semester | | | | | | |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| | | | — | — | — | — |
| | | | 8 | 10 | 0 | 12 |
| First Year — Summer Semester | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 2 | 0 | 12 |
| Second Year — Fall Semester | | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | | or | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 9 | 0 | 15 |
| Second Year — Spring Semester | | | | | | |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| | | or | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| | | and | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |
| | | IT Major Elective** | 1-3 | 0-3 | 0 | 4 |
| | | | — | — | — | — |
| | | | 6-8 | 5-12 | 0-10 | 12-13 |
| Total Credit Hours | | | | 64-65 | | |

*Approved Humanities/Fine Arts electives offered online: ART 111, ENG 231, MUS 110, PHI 240, REL 211, REL 212.

*Approved Social/Behavioral Sciences electives offered online: ANT 220, HIS 131, HIS 132, HIS 236, POL 120, PSY 150, PSY 241, SOC 210, SOC 213.

**Approved IT Major Electives may be selected from courses listed above.

**SOFTWARE AND WEB DEVELOPMENT (DIPLOMA) (D25590C) (ONLINE)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-------------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | | or | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |
| Total Credit Hours | | | | | 46 | |

**WEB DEVELOPMENT SPECIALIST (CERTIFICATE) (C25590C1) (ONLINE)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-----------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |
| | | | — | — | — | — |
| | | | 12 | 15 | 0 | 18 |
| Total Credit Hours | | | | | 18 | |

**COMPUTER PROGRAMMING SPECIALIST (CERTIFICATE) (C25590C2) (ONLINE)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-----------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| | | | — | — | — | — |
| | | | 12 | 16 | 0 | 18 |
| Total Credit Hours | | | | | | 18 |

**MOBILE APPLICATIONS DEVELOPMENT SPECIALIST (CERTIFICATE)
(C25590C3) (ONLINE)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-----------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 12 | 15 | 0 | 18 |
| Total Credit Hours | | | | | | 18 |

The courses listed on this program guide are the courses currently offered online through Richmond Community College. Please speak to your advisor if you have taken courses at another college or university.

The following courses are part of the North Carolina Articulation Agreement: ACC 120, ART 111, BUS 110, BUS 115, BUS 137, CIS 110, CIS 115, COM 231, CSC 151, ECO 251, ECO 252, ENG 111, ENG 112, ENG 231, ENG 232, MAT 143, MUS 110, PHI 240, and SPA 111. The North Carolina Comprehensive Articulation Agreement is a statewide agreement governing transfer credits from North Carolina community colleges to North Carolina public universities and participating private universities. RichmondCC cannot guarantee the transfer of courses to out-of-state universities.

**NETWORK MANAGEMENT (CERTIFICATE) (C25590D1)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 15 | 0 | 18 |
| Total Credit Hours | | | | | | 18 |

**NETWORK+ PREP (CERTIFICATE) (C25590D2)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 7 | 11 | 0 | 12 |
| Total Credit Hours | | | | | | 12 |

Note: Network+ Prep (C25590D2) is a subset of the Network Management (C25590D1) certificate. Students using financial aid should enroll in Network Management (C25590D1).

**NETWORK MANAGEMENT (CERTIFICATE) (C25590D1) (ONLINE)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 15 | 0 | 18 |
| Total Credit Hours | | | | | | 18 |

**NETWORK+ PREP (CERTIFICATE) (C25590D2) (ONLINE)
COURSE REQUIREMENTS**

| | | | Work/ | | | |
|---------------------------|-----|-------------------------------|--------------|------------|-----------------|---------------|
| | | | Class | Lab | Clinical | Credit |
| CTI | 120 | Network & Security Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 7 | 11 | 0 | 12 |
| Total Credit Hours | | | | | | 12 |

Note: Network+ Prep (C25590D2) is a subset of the Network Management (C25590D1) certificate. Students using financial aid should enroll in Network Management (C25590D1).

**IT – INFORMATION TECHNOLOGY SUPPORT - HEALTHCARE
(A25590E)
COURSE REQUIREMENTS**

| | | | Class | Lab | Work/ Clinical | Credit |
|---|-----|--------------------------------------|-------|-----|-------------------|--------|
| A. General Education Courses | | | | | | |
| 1. Required Courses | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| or | | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| B. Major Courses | | | | | | |
| 1. Core Courses | | | | | | |
| <i>To receive a degree, diploma or certificate from RCC, a student must have a grade of “C” or better in all core courses for the program of study.</i> | | | | | | |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Sec Foundation | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| 2. Other Major Courses | | | | | | |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| CTS | 220 | Adv Hard/Software Support | 2 | 3 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| or | | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| and | | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| HMT | 110 | Intro to Healthcare Mgt | 3 | 0 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| PMT | 110 | Intro to Project Mgmt | 3 | 0 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | IT Major Elective** | 2-3 | 0-3 | 0 | 4 |
| C. Other Required Courses | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |

Total Credit Hours

67-68

*Approved Humanities/Fine Arts and Social/Behavioral Sciences Electives are listed on the page before the Course Descriptions.

**Approved IT Major Electives may be selected from courses listed below. IT Support students must choose a total of 4 credit hours from this list. Only 3 SCH of SPA are allowed towards the Information Technology degree:

| | | | | | | |
|-----|-----|------------------------------------|---|---|---|---|
| ACC | 115 | College Accounting | 3 | 2 | 0 | 4 |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 0 | 4 |
| BUS | 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS | 125 | Personal Finance | 3 | 0 | 0 | 3 |
| BUS | 137 | Principles of Management | 3 | 0 | 0 | 3 |
| BUS | 139 | Entrepreneurship I | 3 | 0 | 0 | 3 |
| BUS | 230 | Small Business Management | 3 | 0 | 0 | 3 |
| BUS | 260 | Business Communications | 3 | 0 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CSC | 153 | C# Programming | 2 | 3 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 130 | Spreadsheet | 2 | 2 | 0 | 3 |
| DBA | 110 | Database Concepts | 2 | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 0 | 3 |
| ELC | 112 | DC/AC Electricity | 3 | 6 | 0 | 5 |
| HMT | 210 | Medical Insurance | 3 | 0 | 0 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| MKT | 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| MKT | 223 | Customer Service | 3 | 0 | 0 | 3 |
| OST | 136 | Word Processing | 2 | 2 | 0 | 3 |
| OST | 137 | Office Software Applications | 2 | 2 | 0 | 3 |
| PMT | 210 | Project Management Issues | 2 | 2 | 0 | 3 |
| PMT | 215 | Project Management Leadership | 3 | 0 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |

SEMESTER SCHEDULE
IT – INFORMATION TECHNOLOGY SUPPORT - HEALTHCARE (A25590E)

| | | | Work/ | | | |
|--------------------------------------|-----|--------------------------------------|-------|-----|----------|--------|
| | | | Class | Lab | Clinical | Credit |
| First Year — Fall Semester | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Sec Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| PMT | 110 | Intro to Project Mgmt | 3 | 0 | 0 | 3 |
| | | | — | — | — | — |
| | | | 9 | 9 | 0 | 13 |
| First Year — Spring Semester | | | | | | |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 220 | Adv Hard/Software Support | 2 | 3 | 0 | 3 |
| HMT | 110 | Intro to Healthcare Mgt | 3 | 0 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 9 | 0 | 15 |
| First Year — Summer Semester | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 2 | 0 | 12 |
| Second Year — Fall Semester | | | | | | |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration | 2 | 2 | 0 | 3 |
| | | | — | — | — | — |
| | | | 11 | 8 | 0 | 15 |
| Second Year — Spring Semester | | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | | or | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| | | or | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| | | and | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | IT Major Elective** | 2-3 | 0-3 | 0 | 4 |

— — — —
8-9 2-9 0-10 12-13

Total Credit Hours

67-68

*Approved Humanities/Fine Arts and Social/Behavioral Sciences Electives are listed on the page before the Course Descriptions.

**Approved IT Major Electives may be selected from courses listed above.

**IT – INFORMATION TECHNOLOGY SUPPORT – HEALTHCARE (DIPLOMA)
(D25590E)
COURSE REQUIREMENTS**

| | | | Class | Lab | Work/ Clinical | Credit |
|---------------------------|-----|-------------------------------------|-------|-----|-------------------|-----------|
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | | or | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Sec Foundation | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| CTS | 220 | Adv Hard/Software Support | 2 | 3 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| Total Credit Hours | | | | | | 46 |

**IT – INFORMATION TECHNOLOGY SUPPORT - HEALTHCARE
(A25590E) (ONLINE)
COURSE REQUIREMENTS**

| | | | Class | Lab | Work/ Clinical | Credit |
|---|-----|--------------------------------------|-------|-----|-------------------|--------|
| A. General Education Courses | | | | | | |
| 1. Required Courses | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| or | | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| B. Major Courses | | | | | | |
| 1. Core Courses | | | | | | |
| <i>To receive a degree, diploma or certificate from RCC, a student must have a grade of “C” or better in all core courses for the program of study.</i> | | | | | | |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Sec Foundation | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| 2. Other Major Courses | | | | | | |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | |
| CTS | 220 | Adv Hard/Software Support | 2 | 3 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| or | | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| and | | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| HMT | 110 | Intro to Healthcare Mgt | 3 | 0 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration I | 2 | 2 | 0 | 3 |
| PMT | 110 | Intro to Project Mgmt | 3 | 0 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | IT Major Elective** | 2-3 | 0-3 | 0 | 4 |
| C. Other Required Courses | | | | | | |
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |

Total Credit Hours

67-68

*Approved Humanities/Fine Arts electives offered online: ART 111, ENG 231, MUS 110, PHI 240, REL 211, REL 212.

*Approved Social/Behavioral Sciences electives offered online: ANT 220, HIS 131, HIS 132, HIS 236, POL 120, PSY 150, PSY 241, SOC 210, SOC 213.

**Approved IT Major Electives may be selected from courses listed below. IT Support students must choose a total of 4 credit hours from this list. Only 3 SCH of SPA are allowed towards the Information Technology degree:

| | | | | | | |
|-----|-----|------------------------------------|---|---|---|---|
| ACC | 115 | College Accounting | 3 | 2 | 0 | 4 |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 0 | 4 |
| BUS | 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS | 125 | Personal Finance | 3 | 0 | 0 | 3 |
| BUS | 137 | Principles of Management | 3 | 0 | 0 | 3 |
| BUS | 139 | Entrepreneurship I | 3 | 0 | 0 | 3 |
| BUS | 230 | Small Business Management | 3 | 0 | 0 | 3 |
| BUS | 260 | Business Communications | 3 | 0 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| CIS | 115 | Introduction to Programming Logic | 2 | 3 | 0 | 3 |
| CSC | 151 | JAVA Programming | 2 | 3 | 0 | 3 |
| CSC | 153 | C# Programming | 2 | 3 | 0 | 3 |
| CSC | 251 | Advanced JAVA Programming | 2 | 3 | 0 | 3 |
| CTS | 130 | Spreadsheet | 2 | 2 | 0 | 3 |
| DBA | 110 | Database Concepts | 2 | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 0 | 3 |
| HMT | 210 | Medical Insurance | 3 | 0 | 0 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| MKT | 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| MKT | 223 | Customer Service | 3 | 0 | 0 | 3 |
| OST | 136 | Word Processing | 2 | 2 | 0 | 3 |
| OST | 137 | Office Software Applications | 2 | 2 | 0 | 3 |
| PMT | 210 | Project Management Issues | 2 | 2 | 0 | 3 |
| PMT | 215 | Project Management Leadership | 3 | 0 | 0 | 3 |
| SEC | 160 | Security Administration I | 2 | 2 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 0 | 3 |
| WEB | 140 | Web Development Tools | 2 | 3 | 0 | 3 |
| WEB | 141 | Mobile Interface Design | 2 | 2 | 0 | 3 |
| WEB | 250 | Database Driven Websites | 2 | 3 | 0 | 3 |

SEMESTER SCHEDULE
IT – INFORMATION TECHNOLOGY SUPPORT - HEALTHCARE (A25590E)
(ONLINE)

**Work/
Class Lab ClinicalCredit**

First Year — Fall Semester

| | | | | | | |
|-----|-----|---------------------------|---|---|---|----|
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Sec Foundation | 2 | 2 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| PMT | 110 | Intro to Project Mgmt | 3 | 0 | 0 | 3 |
| | | | 9 | 9 | 0 | 13 |

First Year — Spring Semester

| | | | | | | |
|-----|-----|----------------------------|----|---|---|----|
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 220 | Adv Hard/Software Support | 2 | 3 | 0 | 3 |
| HMT | 110 | Intro to Healthcare Mgt | 3 | 0 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| | | | 11 | 9 | 0 | 15 |

First Year — Summer Semester

| | | | | | | |
|-----|-----|--------------------------------------|----|---|---|----|
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | Humanities/Fine Arts Elective* | 3 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences Elective* | 3 | 0 | 0 | 3 |
| | | | 11 | 2 | 0 | 12 |

Second Year — Fall Semester

| | | | | | | |
|-----|-----|--------------------------|----|---|---|----|
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 230 | Windows Administration | 2 | 2 | 0 | 3 |
| | | | 11 | 8 | 0 | 15 |

Second Year — Spring Semester

| | | | | | | |
|-----|-----|-------------------------------------|-----|-----|------|-------|
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| or | | | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTS | 289 | System Support Project | 1 | 4 | 0 | 3 |
| or | | | | | | |
| WBL | 111 | Work-Based Learning I | 0 | 0 | 10 | 1 |
| and | | | | | | |
| WBL | 115 | Work-Based Learning Seminar I | 1 | 0 | 0 | 1 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | IT Major Elective** | 2-3 | 0-3 | 0 | 4 |
| | | | 8-9 | 2-9 | 0-10 | 12-13 |

Total Credit Hours

67-68

*Approved Humanities/Fine Arts electives offered online: ART 111, ENG 231, MUS 110, PHI 240, REL 211, REL 212.

*Approved Social/Behavioral Sciences electives offered online: ANT 220, HIS 131, HIS 132, HIS 236, POL 120, PSY 150, PSY 241, SOC 210, SOC 213.

**Approved IT Major Electives may be selected from courses listed above.

**IT – INFORMATION TECHNOLOGY SUPPORT - HEALTHCARE
(DIPLOMA) (D25590E) (ONLINE)
COURSE REQUIREMENTS**

| | | | Class | Lab | Work/ Clinical | Credit |
|---------------------------|-----|-------------------------------------|--------------|------------|---------------------------|---------------|
| ACA | 122 | College Transfer Success | 0 | 2 | 0 | 1 |
| COM | 231 | Public Speaking | 3 | 0 | 0 | 3 |
| | | or | | | | |
| ENG | 112 | Writing/Research in the Disciplines | 3 | 0 | 0 | 3 |
| CTI | 110 | Web, Pgm, & DB Foundation | 2 | 2 | 0 | 3 |
| CTI | 120 | Network & Sec Foundation | 2 | 2 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS | 120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| CTS | 155 | Tech Support Functions | 2 | 2 | 0 | 3 |
| CTS | 220 | Adv Hard/Software Support | 2 | 3 | 0 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 0 | 3 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| HBI | 110 | Issues and Trends in HBI | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| NET | 125 | Introduction to Networks | 1 | 4 | 0 | 3 |
| NOS | 120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS | 130 | Windows Single User | 2 | 2 | 0 | 3 |
| SEC | 110 | Security Concepts | 2 | 2 | 0 | 3 |
| Total Credit Hours | | | | | 46 | |

The courses listed on this program guide are the courses currently offered online through Richmond Community College. Please speak to your advisor if you have taken courses at another college or university.

The following courses are part of the North Carolina Articulation Agreement: ACC 120, ART 111, BUS 110, BUS 115, BUS 137, CIS 110, CIS 115, COM 231, CSC 151, ECO 251, ECO 252, ENG 111, ENG 112, ENG 231, ENG 232, MAT 143, MUS 110, PHI 240, and SPA 111. The North Carolina Comprehensive Articulation Agreement is a statewide agreement governing transfer credits from North Carolina community colleges to North Carolina public universities and participating private universities. RichmondCC cannot guarantee the transfer of courses to out-of-state universities.

