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					

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.

				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	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
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

			Class	Lab	Work/Clinical	Credit
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)

			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

			Class	Lab	Work/Clinical	Credit
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

			Class	Lab	Work/Clinical	Credit
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

			Class	Lab	Work/Clinical	Credit
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
			12	15	0	18

Total Credit Hours   **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
			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).

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						
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.						
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
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 or	231	Public Speaking	3	0	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
CTS or	289	System Support Project	1	4	0	3
WBL and	111	Work-Based Learning I	0	0	10	1
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

			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) (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
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
			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

			Class	Lab	Work/Clinical	Credit
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

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.

			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	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

			Class	Lab	Work/Clinical	Credit
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

			Class	Lab	Work/Clinical	Credit
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
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)

			Class	Lab	Work/ 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 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

				Class	Lab	Work/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

				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
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/ ClinicalCredit	

A. General Education Courses

1. Required Courses

				Class	Lab	Clinical	Credit
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

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.

			Class	Lab	Clinical	Credit
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
SEC	110	Security Concepts	2	2	0	3

2. Other Major Courses

			Class	Lab	Clinical	Credit
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
		IT Major Elective**	Varies	Varies	0	4

C. Other Required Courses

			Class	Lab	Clinical	Credit
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
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)

			Class	Lab	Work/ 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

			Class	Lab	Work/ 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

			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
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						

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.

			Class	Lab	Work/ Clinical	Credit
CSC	151	JAVA Programming	2	3	0	3
CSC	153	C# 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
2. Other Major Courses						
CIS	115	Introduction to Programming Logic	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	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
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**	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. 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
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)

			Class	Lab	Work/ 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	153	C# 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	151	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 and Social/Behavioral Sciences Electives are listed on the page before the Course Descriptions.
**Approved IT Electives may be selected from courses listed above.

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

			Class	Lab	Work/ 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	153	C# 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)
COURSE REQUIREMENTS

			Class	Lab	Work/ 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)
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
CSC	153	C# 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							

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.

				Class	Lab	Work/Clinical	Credit
	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
	CSC	153	C# Programming	2	3	0	3
	CTS	115	Info Sys Business Concepts	3	0	0	3
	CTS	120	Hardware/Software Support	2	3	0	3
2. Other Major Courses							
	CIS	115	Introduction to Programming Logic	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	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
	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
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)

			Class	Lab	Work/ 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	153	C# 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 or	231	Public Speaking	3	0	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
CSC	151	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 or	289	System Support Project	1	4	0	3
WBL and	111	Work-Based Learning I	0	0	10	1
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

			Class	Lab	Work/ 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	153	C# 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

			Class	Lab	Work/ 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

			Class	Lab	Work/Clinical	Credit
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
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

			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**

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

			Class	Lab	Work/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

			Class	Lab	Work/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

			Class	Lab	Work/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

			Class	Lab	Work/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							

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.

				Class	Lab	Work/ Clinical	Credit
	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
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)

			Class	Lab	Work/ 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 or	231	Public Speaking	3	0	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
CTS or	289	System Support Project	1	4	0	3
WBL and	111	Work-Based Learning I	0	0	10	1
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						

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.

			Class	Lab	Work/ Clinical	Credit
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
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)

	Class	**Lab**	**Work/ 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 or	231	Public Speaking	3	0	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
CTS or	289	System Support Project	1	4	0	3
WBL and	111	Work-Based Learning I	0	0	10	1
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.